LANE
MEDICAL LIBRARY
GIFT
Dr.E.L.Woolsey

JOURNAL OF PROCEEDINGS AND ADDRESSES

OF THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Digitized by the Internet Archive
in 2025

https://archive.org/details/journalofproceed0000unse_e8q2

NATIONAL EDUCATION ASSOCIATION
OF THE UNITED STATES

Journal

OF

Proceedings and Addresses

OF THE

FORTY-NINTH ANNUAL MEETING

HELD AT

SAN FRANCISCO, CALIFORNIA

JULY 8–14

1911

1911
Published by the Association
SECRETARY'S OFFICE, WINONA, MINN.

Composed and Printed By
The University of Chicago Press
Chicago, Ill., U.S.A.

VISABILI BRAT

CONTENTS

	PAGE
Act of Incorporation	1
By-Laws	5
Certificate of Incorporation	9
Calendar of Meetings	10
Officers for 1910–11	12
Officers for 1911–12	16
Report of Treasurer	20
Report of Board of Trustees	23
Annual Meeting of Active Members	27
Minutes of Meeting of Board of Directors for 1910–11	37
Minutes of Meeting of Board of Directors for 1911–12	54
Minutes of Meetings of Board of Trustees	59
Secretary's Minutes of General Sessions	61

GENERAL SESSIONS

Addresses of Welcome:	
I. *Johnson*	67
II. *McCarthy*	67
III. *Wheeler*	69
IV. *Hale*	71
Response to Addresses of Welcome—*Aley*	72
Introduction of President Young—*Pickard*	74
Temperance and Society—*Jordan*	75
The Cause of Education—*Mrs. Wixson*	83
Hypothesis in Education—*Mrs. Young*	87
An Appreciation—*Roncovieri*	91
Reorganization of American Education—*Baker*	94
The Opportunity of the Teacher—*Mrs. Blaine*	103
The Development of Personality thru Education—*Miss Schallenberger*	116
The Compensation of Teachers—*Scott*	121
The Life of the Teacher—*Zueblin*	123
Can We Shorten the Term of Years without Decreasing Efficiency of Education in American Schools?—*Avery*	126
Present Problems in English Education—*Miss Stevens*	132
Peace in the Schools—*Miss Blake*	140
Progress in Public Education—*Blair*	146
In Memoriam—James Ormond Wilson—*Bicknell*	155

DEPARTMENT OF SUPERINTENDENCE (Mobile Meeting, 1911)

Secretary's Minutes—*Call*	161
TOPIC: A MESSAGE OF ACHIEVEMENT FROM THE SOUTHLAND	
A. The Progress of Its Schools—*Willingham*	166
B. The Ideals of Its People—*Gwinn*	169
C. The Glory of Its Children—*Evans*	175

88944

In Memoriam
A. Warren Easton—*Aswell* 179
B. William Wallace Stetson—*Smith* 180
Topic: The Present Status of Education in America
A. In the Elementary Schools—*Mrs. Young* 183
B. In the Secondary Schools—*Graff* 186
C. In the Colleges and Universities—*Benton* 191
The Standards of Professional Life as Applied to Teaching—*Suzzallo* . . 199
Topic: Our Educational Advance and Improvement over the Past
A. In the City—*Chadsey* 203
B. In the State—*Cary* 210
C. In the Nation—*Brown* 215
Preliminary Report of the Committee on Economy of Time in Education—*Suzzallo* 222
An Educational Epoch in New America—*MacLean* 226
Topic: The Coming of the Humane Element in Education
A. The Open-Air School—*Kingsley* 236
B. The Training of the Mentally and Physically Unfortunate—*Ayres* . . 242
C. The Peace Movement and the Public Schools—*Mrs. Andrews* . . 247
D. Education of the American Indian—*Peairs* 252
Report of the Committee on the Mexican Centennial—*Cummings* . . . 255
Topic: The Progress and the True Meaning of the Practical in Education
A. In Vocational Training—*Gibson* 260
B. In the Balanced Course of Study and the All-year-round Schools—*Luckey* 267
Preliminary Report of the Committee on Uniform Records and Reports . . 271

ROUND TABLES

Round Table of State and County Superintendents:
Topic: A Story of Achievement and Endeavor in Co-operation
The County Superintendent and the Rural Communities—*Miss Lathrop* 303
The State Superintendent, the County Superintendent, and the State Normal—*Marsh* 304
The State Superintendent and the General and Southern Education Boards—*Cook* 305
Round Table of Superintendents of Smaller Cities:
Topic: Unity of Ideals and Purposes in Teachers
A. As Gained from Professional Training—*Thompson* 309
B. As Gained from School Supervision—*Warriner* 311
C. As Gained from School Administration—*Mrs. Hyre* 319
Final Report of the Committee of the Department of Superintendence on a Universal System of Key Notation 323

NATIONAL COUNCIL OF EDUCATION

Constitution 331
Officers and Members 333
Secretary's Minutes 336
Introductory Statement by the President of the Council—*Keyes* 340
Tentative Report of the Committee on a System of Teaching Morals in the Public Schools 342
Introduction and Recommendations 343
Moral Education: The Problem Stated—*Brumbaugh* 347

Moral Education thru the Agency of the Public Schools—*Carr* . . 351
I. Moral Instruction in the Public Schools—A Tentative Course by Grades 351
II. Means of Moral Training Afforded by the Public Schools . . 367
The Home and School Life—*Greenwood* 377
Relation of Moral and Religious Training—*Barnes* 397
Status of Moral Training in the Public Schools—*Barnes* 400
Virtue and the Virtues: A Study of Method in the Teaching of Morals—*Coe* . 419
Moral Training of College Students—*Jordan* 425
Some Instinctive Roots upon Which the Teaching of Morals in the Public Schools May Be Grafted—*Rugh* 426
The Improvement of Teachers in Service in City Schools—*Updegraff* . . . 433
Topic: High-School Preparation of Candidates for Normal-School Training
I. *Felmley* 445
II. *Kirk* 450
Topic: Needed Adjustments between Secondary Schools and Colleges
I. *Aley* 461
II. *Luckey* 466
III. *Caldwell* 471

DEPARTMENT OF KINDERGARTEN EDUCATION

Secretary's Minutes 477
Music in the Kindergarten—*Miss Hofer* 479
The Development of the Color Sense—*Miss Ball* 484
In Memoriam—Milton Bradley—*Webber* 488
The Kindergarten: Its Influences upon Higher Education—*Boone* . . . 490
Moral Instruction of the Child—*Rugh* 497
The Kindergarten as an Ethical Laboratory—*Miss Pluss* 503
The Kindergarten as a Factor in Education for Efficiency—*Miss McConkey* . 507
The Kindergarten of the Future—*Parlin* 511

DEPARTMENT OF ELEMENTARY EDUCATION

Secretary's Minutes 517
The Need of a New Standard of Measurement for the Various Subjects of the Curriculum—*Snyder* 518
Industrial Education in London—*Miss Stevens* 523
Report on the Motivation of the Children's Work in the Elementary Schools—*Wilson* 528
The Health of School Children—*Aley* 544
Playgrounds and Health—*Weir* 549

DEPARTMENT OF SECONDARY EDUCATION

Secretary's Minutes 555
Report of the Committee of Nine on the Articulation of High School and College—*Kingsley* 559
The New Harvard Plan for College Admission—*Davis* 567
The New University of Chicago Plan for College Admission—*Caldwell* . . 572
The High-School Teacher Himself—*Barrett* 576
Extra-Classroom Activities in High School: Their Place and Their Importance—*Bentley* 581

Social Functions—*Hanna* 586
School Publications, Literary and Musical Organizations, Dramatics—*Brink* . 588
Report of the Committee on Cosmopolitan High-School Curriculum—*Smith* . 591

ROUND-TABLE CONFERENCES

A. English—
The Questions at Issue—*Hosic* 592
Organization of the Course in Literature in Secondary Schools, Particularly With a Regard to History—*Mrs. Hulst* 598
B. Mathematics—
Provisional Report of the National Committee of Fifteen on Geometry Syllabus 607
C. Classical—
Latin in the Lower Grades (below the High School)—*Nutting* . . . 635
Making Latin Composition of Greater Value—*Graves* 637
D. Modern Foreign Languages—
The Final Aim of Modern Foreign Language Study in Secondary Education —*Senger* 639
Literary Appreciation in the Study of Foreign Languages: Its Opportunities and Limitations; with Special Reference to the Study of French—*Guérard* 641
Simplified Spelling From the Scholarly Standpoint and with Reference to the Masses: The Argument for Simplified Spelling—*Gideon* . . 645
Simplified Spelling with Reference to the Masses—*Seerley* 651

DEPARTMENT OF HIGHER EDUCATION

Secretary's Minutes 659
The Separation and Development of the Junior College as Distinct From the University—*Duniway* 660
The Relation of the College of Liberal Arts to the Professional and Practical Schools —*Kane* 664
The Building up of Professional Education on a Collegiate Foundation from the Viewpoint of the Professional Schools—*Jordan* 670
Some Phases of University Efficiency—*Lange* 672
The Supply of and Demand for Engineering Graduates in the United States—*Little* 681
The Future of Intercollegiate Athletics in the Western States—*Campbell* . . 688

DEPARTMENT OF NORMAL SCHOOLS

Secretary's Minutes 695
The Relation of Academic and Professional Work in a Normal School—*Seerley* . 697
The Normal School and the Training School—*Felmley* 700
Report of the Committee on Simplified Spelling 704
Report of the National Committee on Agricultural Education 706

DEPARTMENT OF MANUAL TRAINING AND ART EDUCATION

Secretary's Minutes 709
To What Extent Does Manual Training Aid in Adjustment to Environment?—*Connelley* 711
Dynamic Value of Manual Arts in the Public-School System of Education—*Sensor* 719
The Requisites of the Efficient Teacher in Industrial Schools—*Gerwig* . . 722

Report of the Committee on College-Entrance Requirements 729
The New Standard of the Present-Day Industrial Education in Europe—*Kreuzpointner* 740
The Requisites for the Effective Teaching of the Manual and Household Arts—*Miss Johnson* 747
Some Present Problems in the Literature of the Manual Arts and Vocational Education—*Guillou* 756
The Public-School Domestic-Science Department as an Influence in the Community for Enforcing Pure-Food Laws and Civic Cleanliness—*Miss Clark* . . 760
Some Actual Needs for Intelligent Purchasing of Household Commodities and Practical Methods of Keeping Household Accounts—*Miss Flagg* . . 765
Art Education in Public Schools a Necessity of Civic Perfection—*Clark* . . 769
Art's Service as a Basis for Classified Knowledge (Scientific Development)—*Boone* 778
What Has Art in the Schools Done to Preserve and Cultivate the Imagination?—*Miss Gearhart* 783

DEPARTMENT OF MUSIC EDUCATION

Secretary's Minutes 787
Public-School Music in Relation to the Music of the Community—*Miss Shawe* 790
Some Mistakes of the Music Teacher Which the Viewpoint of the Child Would Correct—*Miss Crane* 794
Report of the Committee on Terminology 802
Music in the College—*Foote* 803
The Relation of Music to School Activities—*Miss Fisher* 808
Public-School Music and Our National Speech—*Mrs. Clark* 813
The Opportunity and the Responsibility of Normal Schools in Public-School Music—*Fullerton* 822

DEPARTMENT OF BUSINESS EDUCATION

Secretary's Minutes 827
Bookkeeping Fundamentals—*McKinney* 829
Teaching Typewriting for the Best Results—*Curry* 834
Business English—What? Why? How?—*Cody* 839
Commercial-Economic Geography—*Childs* 842
Shorthand—Its Educational and Practical Value—*Clark* 845
Curricula for High Schools of Commerce in the United States—*Murphy* . . 852
To What Extent Are Teachers Responsible for Failures of Students in the Classroom:
I. *Brecheen* 857
II. *Bernhard* 861
The Essentials of the Ideal Commercial Teacher—*Fisher* 865

DEPARTMENT OF CHILD HYGIENE

Secretary's Minutes 869
Two Thousand Children Tested by the Binet Measuring Scale for Intelligence—*Goddard* 870
Results and Impressions of a Preliminary Study of Pedagogical Retardation—*Davidson* 878
Health and Ventilation—*Ayres* 885
The Influence of Open-Air and Low-Temperature Schoolrooms on the Mental Alertness and Scholarship of Pupils—*Bruner* 890
Open-Air Schools—*Ayres* 898

DEPARTMENT OF PHYSICAL EDUCATION

Secretary's Minutes 905
Report of the School Health Committee of the Department of School Patrons 906
Report of the Public Health Education Committee of the American Medical Association 909
The Health of the Child the Joint Concern of Parent and Teacher—*Evans* . 913
Sex Hygiene—*Miss Greene* 917
The Playground Movement in America—*Weir* 925
Physical Training for Girls of High-School Age—The Biological Point of View—*Tyler* 933

DEPARTMENT OF SCIENCE INSTRUCTION

Secretary's Minutes 939
Elementary or General Science From the Standpoint of the Eastern Schoolmaster—*Cowen* 940
General Science in the High School—*Avery* 944
Elementary or General Science for High Schools as It Appears to a Western College Professor—*Morgan* 948
Forest Conservation—*Allen* 952
Water-Powers, Lands, and Minerals—*Pardee* 958
National Vitality—*Snow* 965
The Teacher's Part in Conservation—*Burk* 970
Report of Committee on Efficiency of Janitor Service 977
The Scientific Basis for Ventilation Standards—*Winslow* 977
Bacteriological Tests of Methods of Cleaning—*Frost* and *Armstrong* . . 985
Our Short Course for Janitors—*Frost* 990

DEPARTMENT OF SCHOOL ADMINISTRATION

Secretary's Minutes 993
The Ideal School Board From the Superintendent's Point of View—*Hines* . . 994
The Relation of the Indiana Accounting Board to Public Schools—*Myers* . 1002
Pupil Self-Government as a Training for Citizenship—*Welling* . . . 1005
Present-Day Tendencies of School Architecture—*Patton* 1009

LIBRARY DEPARTMENT

Secretary's Minutes 1015
The Proper Supervision of the Reading of School Children—*Miss Blake* . . 1016
High-School Libraries—*Miss Fagge* 1019
California County Free Libraries—*Miss Eddy* 1026

DEPARTMENT OF SPECIAL EDUCATION

Secretary's Minutes 1031
The School Laggard—*Pearse* 1033
Separate Schools with Separate Courses of Training for the Separate Needs of Our Children—*Heeter* 1034
Causes of Backwardness and Mental Deficiency in Children and How to Prevent Them—*Goddard* 1039
Can We Eliminate the School Laggard?—*Luckey* 1046
The Prevention of Blindness in Children under School Age—*Stevenson* . . 1051
The Hygiene of Vision—*Lewis* 1059
School Activities in Relation to Children's Eyes—*Shawan* 1063

Legal Provisions for Exceptional Children—*Groszmann* 1070
What Constitutes a Subnormal Child, and to What Extent Can He Be Trained?—*Mrs. Hicks* 1077
Physiology and Pscyhology of the Deaf Child—*Lowry* 1084

DEPARTMENT OF SCHOOL PATRONS

Secretary's Minutes 1093
Report of the School Revenue Committee of the Department of School Patrons . 1094
Summary of State Reports of Joint Committees and Affiliated Organizations 1910–11 1097
Co-operation between Home and School—*Owen* 1103
Child Protection and the Social Evil—*Sumner* 1110

DEPARTMENT OF RURAL AND AGRICULTURAL EDUCATION

Secretary's Minutes 1117
Agricultural Nature-Study—*Palmer* 1118
School Gardening in Hawaii as Related to Agricultural Education—*MacCaughey* 1126
Potentiality of the School Garden—*Stebbins* 1131
Report of Committee on Courses of Study in Agriculture—*Bishop* 1138
Agriculture and Domestic Science in Normal Schools with Special Reference to Preparing Teachers for Community Work—*Kirk* 1152
Physical Education in Elementary Rural Schools—*Alderman* 1156

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

1857–1870

THE NATIONAL TEACHERS ASSOCIATION

Organized August 26, 1857, at Philadelphia, Pennsylvania.

PURPOSE—*To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States.*

The name of the association was changed at Cleveland, Ohio, on August 15, 1870, to the "National Educational Association."

1870–1907

NATIONAL EDUCATIONAL ASSOCIATION

Incorporated under the laws of the District of Columbia, February 24, 1886, under the name, "National Education Association," which was changed to "National Educational Association," by certificate filed November 6, 1886.

1907–

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Incorporated under a special act of Congress, approved June 30, 1906, to succeed the "National Educational Association." The charter was accepted and by-laws were adopted at the Fiftieth Anniversary Convention held July 10, 1907, at Los Angeles, California.

ACT OF INCORPORATION

AN ACT TO INCORPORATE THE NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

SECTION 1. That the following named persons, who are now officers and directors and trustees of the National Educational Association, a corporation organized in the year eighteen hundred and eighty-six, under the Act of General Incorporation of the Revised Statutes of the District of Columbia, viz.: Nathan C. Schaeffer, Eliphalet Oram Lyte, John W. Lansinger, of Pennsylvania; Isaac W. Hill, of Alabama; Arthur J. Matthews, of Arizona; John H. Hineman, George B. Cook, of Arkansas; Joseph O'Connor, Josiah L. Pickard, Arthur H. Chamberlain, of California; Aaron Gove, *Ezekiel H. Cook, Lewis C. Greenlee, of Colorado; Charles H. Keyes, of Connecticut; George W. Twitmyer, of Delaware; J. Ormond Wilson, *William T. Harris, Alexander T. Stuart, of the District of

* Deceased.

Columbia; Clem Hampton, of Florida; William M. Slaton, of Georgia; Frances Mann, of Idaho; J. Stanley Brown, *Albert G. Lane, Charles I. Parker, John W. Cook, Joshua Pike, Albert R. Taylor, Joseph A. Mercer, of Illinois; Nebraska Cropsey, Thomas A. Mott, of Indiana; John D. Benedict, of Indian Territory; John F. Riggs, Ashley V. Storm, of Iowa; John W. Spindler, Jasper N. Wilkinson, A. V. Jewett, Luther D. Whittemore, of Kansas; William Henry Bartholomew, of Kentucky; Warren Easton, of Louisiana; *John S. Locke, of Maine; M. Bates Stephens, of Maryland; Charles W. Eliot, *Mary H. Hunt, Henry T. Bailey, of Massachusetts; Hugh A. Graham, Charles G. White, William H. Elson, of Michigan; *William F. Phelps, Irwin Shepard, John A. Cranston, of Minnesota; Robert B. Fulton, of Mississippi; *F. Louis Soldan, James M. Greenwood, William J. Hawkins, of Missouri; Oscar J. Craig, of Montana; George L. Towne, of Nebraska; Joseph E. Stubbs, of Nevada; James E. Klock, of New Hampshire; James M. Green, John Enright, of New Jersey; Charles M. Light, of New Mexico; *James H. Canfield, Nicholas Murray Butler, William H. Maxwell, Charles R. Skinner, *Albert P. Marble, James C. Byrnes, of New York; James Y. Joyner, Julius Isaac Foust, of North Carolina; Pitt Gordon Knowlton, of North Dakota; Oscar T. Corson, Jacob A. Shawan, Wells L. Griswold, of Ohio; Edgar S. Vaught, Andrew R. Hickham, of Oklahoma; Charles Carroll Stratton, Edwin D. Ressler, of Oregon; Thomas W. Bicknell, Walter Ballou Jacobs, of Rhode Island; David B. Johnson, Robert P. Pell, of South Carolina; Moritz Adelbert Lange, of South Dakota; Eugene F. Turner, of Tennessee; Lloyd E. Wolfe, of Texas; David H. Christensen, of Utah; Henry O. Wheeler, Isaac Thomas, of Vermont; Joseph L. Jarman, of Virginia; Edward T. Mathes, of Washington; T. Marcellus Marshall, Lucy Robinson, of West Virginia; Lorenzo D. Harvey, of Wisconsin; Thomas T. Tynan, of Wyoming; Cassia Patton, of Alaska; Frank H. Ball, of Porto Rico; Arthur F. Griffiths, of Hawaii; C. H. Maxson, of the Philippine Islands, and such other persons as now are or may hereafter be associated with them as officers or members of said Association, are hereby incorporated and declared to be a body corporate of the District of Columbia by the name of the "National Education Association of the United States," and by that name shall be known and have perpetual succession with the powers, limitations, and restrictions herein contained.

SEC. 2. That the purpose and object of the said corporation shall be to elevate the character and advance the interests of the profession of teaching, and to promote the cause of education in the United States. This corporation shall include the National Council of Education and the following departments, and such others as may hereafter be created by organization or consolidation, to wit: the Departments, first, of Superintendence; second, of Normal Schools; third, of Elementary Education; fourth, of Higher Education; fifth, of Manual Training; sixth, of Art Education; seventh, of Kindergarten Education; eighth, of Music Education; ninth, of Secondary Education; tenth, of Business Education; eleventh, of Child-Study; twelfth, of Physical Education; thirteenth, of Natural Science Instruction; fourteenth, of School Administration; fifteenth, the Library Department; sixteenth, of Special Education; seventeenth, of Indian Education; the powers and duties and the number and names of these departments and of the National Council of Education may be changed or abolished at the pleasure of the corporation, as provided in its By-Laws.

SEC. 3. That the said corporation shall further have power to have and to use a common seal, and to alter and change the same at its pleasure; to sue or to be sued in any court of the United States, or other court of competent jurisdiction; to make by-laws not inconsistent with the provisions of this act or of the constitution of the United States; to take or receive, whether by gift, grant, devise, bequest, or purchase, any real or personal estate, and to hold, grant, convey, hire, or lease the same for the purposes of its incorporation; and to accept and administer any trust of real or personal estate for any educational purpose within the objects of the corporation.

SEC. 4. That all real property of the corporation within the District of Columbia,

* Deceased.

which shall be used by the corporation for the educational or other purposes of the corporation as aforesaid, other than the purposes of producing income, and all personal property and funds of the corporation held, used, or invested for educational purposes aforesaid, or to produce income to be used for such purposes, shall be exempt from taxation; *provided*, however, That this exemption shall not apply to any property of the corporation which shall not be used for, or the income of which shall not be applied to, the educational purposes of the corporation; and, *provided further*, That the corporation shall annually file, with the Commissioner of Education of the United States, a report in writing, stating in detail the property, real and personal, held by the corporation, and the expenditure or other use or disposition of the same, or the income thereof, during the preceding year.

SEC. 5. That the membership of the said corporation shall consist of three classes of members—viz., active, associate, and corresponding—whose qualifications, terms of membership, rights, and obligations shall be prescribed by the By-Laws of the corporation.

SEC. 6. That the officers of the said corporation shall be a President, twelve Vice-Presidents, a Secretary, a Treasurer, a Board of Directors, an Executive Committee, and a Board of Trustees.

The Board of Directors shall consist of a President, the First Vice-President, the Secretary, the Treasurer, the chairman of the Board of Trustees, and one additional member from each state, territory, or district, to be elected by the active members for the term of one year, or until their successors are chosen, and of all life directors of the National Educational Association. The United States Commissioner of Education, and all former Presidents of the said Association now living, and all future Presidents of the Association hereby incorporated, at the close of their respective terms of office, shall be members of the Board of Directors for life. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the corporation, excepting those herein intrusted to the Board of Trustees; and shall possess such other powers as shall be conferred upon them by the By-Laws of the corporation.

The Executive Committee shall consist of five members, as follows: the President of the Association, the First Vice-President, the Treasurer, the Chairman of the Board of Trustees, and a member of the Association, to be chosen annually by the Board of Directors, to serve one year. The said committee shall have authority to represent, and to act for, the Board of Directors in the intervals between the meetings of that body, to the extent of carrying out the legislation adopted by the Board of Directors under general directions as may be given by said board.

The Board of Trustees shall consist of four members, elected by the Board of Directors for the term of four years, and the President of the Association, who shall be a member *ex officio*, during his term of office. At the first meeting of the Board of Directors, held during the annual meeting of the Association at which they were elected, they shall elect one trustee for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a trustee from two successive annual meetings of the board shall forfeit his membership.

SEC. 7. That the invested fund now known as the "Permanent Fund of the National Educational Association," when transferred to the corporation hereby created, shall be held by such corporation as a Permanent Fund and shall be in charge of the Board of Trustees, who shall provide for the safekeeping and investment of such fund, and of all other funds which the corporation may receive by donation, bequest, or devise. No part of the principal of such Permanent Fund or its accretions shall be expended, except by a two-thirds vote of the active members of the Association present at any annual meeting, upon the recommendation of the Board of Trustees, after such recommendation has been approved by vote of the Board of Directors, and after printed notice of the proposed expenditure has been mailed to all active members of the Association. The income of the Permanent Fund shall be used only to meet the cost of maintaining the organization of the

Association and of publishing its annual volume of *Proceedings*, unless the terms of the donation, bequest, or devise shall otherwise specify, or the Board of Directors shall otherwise order. It shall also be the duty of the Board of Trustees to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the Association acting under the authority of the Board of Directors. When practicable, the Board of Trustees shall invest, as part of the Permanent Fund, all surplus funds exceeding five hundred dollars that shall remain in the hands of the Treasurer after paying the expenses of the Association for the previous year, and providing for the fixed expenses and for all appropriations made by the Board of Directors for the ensuing year.

The Board of Trustees shall elect the Secretary of the Association, who shall also be secretary of the Executive Committee, and shall fix the compensation and the term of his office for a period not to exceed four years.

SEC. 8. That the principal office of the said corporation shall be in the city of Washington, District of Columbia, *provided*, That the meetings of the corporation, its officers, committees, and departments, may be held, and that its business may be transacted, and an office or offices may be maintained, elsewhere, within the United States, as may be determined, by the Board of Directors, or otherwise in accordance with the By-Laws.

SEC. 9. That the Charter, Constitution, and By-Laws of the National Educational Association shall continue in full force and effect until the charter granted by this act shall be accepted by such Association at the next annual meeting of the Association, and until new By-Laws shall be adopted; and that the present officers, directors, and trustees of said Association shall continue to hold office and perform their respective duties as such until the expiration of terms for which they were severally elected or appointed, and until their successors are elected. That at such annual meeting the active members of the National Educational Association, then present, may organize and proceed to accept the charter granted by this Act and adopt By-Laws, to elect officers to succeed those whose terms have expired or are about to expire, and generally to organize the "National Education Association of the United States"; and that the Board of Trustees of the corporation hereby incorporated shall thereupon, if the charter granted by this Act be accepted, receive, take over, and enter into possession, custody, and management of all property, real and personal, of the corporation heretofore known as the National Educational Association, incorporated as aforesaid, under the Revised Statutes of the District of Columbia and all its rights, contracts, claims, and property of every kind and nature whatsoever, and the several officers, directors, and trustees of such last-named Association, or any other person having charge of any of the securities, funds, books, or property thereof, real or personal, shall on demand deliver the same to the proper officers, directors, or trustees of the corporation hereby created. *Provided*, That a verified certificate executed by the presiding officer and secretary of such annual meeting, showing the acceptance of the charter granted by this act by the National Educational Association shall be legal evidence of the fact, when filed with the Recorder of Deeds of the District of Columbia; and, *provided further*, That in the event of the failure of the Association to accept the charter granted by this act at said annual meeting then the charter of the National Educational Association and its corporate existence shall be, and are hereby extended until the thirty-first day of July, nineteen hundred and eight, and at any time before said date its charter may be extended in the manner and form provided by the general corporation law of the District of Columbia.

SEC. 10. That the rights of creditors of the said existing corporation, known as the National Educational Association, shall not in any manner be impaired by the passage of this act, or the transfer of the property heretofore mentioned, nor shall any liability or obligation, or the payment of any sum due or to become due, or any claim or demand, in any manner, or for any cause existing against the said existing corporation, be released or impaired; and the corporation hereby incorporated is declared to succeed to the obligations and liabilities, and to be held liable to pay and discharge all of the debts, liabilities,

and contracts of the said corporation so existing, to the same effect as if such new corporation had itself incurred the obligation or liability to pay such debt or damages, and no action or proceeding before any court or tribunal shall be deemed to have abated or been discontinued by reason of this act.

SEC. 11. That Congress may from time to time alter, repeal, or modify this act of incorporation, but no contract or individual right made or acquired shall thereby be divested or impaired.

Approved June 30, 1906.

Accepted and adopted as the Constitution of the National Education Association of the United States by the active members of the National Educational Association in annual session at Los Angeles, Cal., July 10, 1907.

BY-LAWS

(Adopted at meeting of active members held in Los Angeles, Cal., July 10, 1907.)

ARTICLE I—MEMBERSHIP

ACTIVE MEMBERS

SECTION 1. Teachers and all who are actively associated with the management of educational institutions, including libraries and educational publications, may become active members.

SEC. 2. Any eligible person may become an active member upon application indorsed by two active members, and the payment of an enrollment fee of two dollars and the annual dues for the current year.

SEC. 3. Active members only shall have the right to vote and to hold office in the Association, in the National Council of Education, or in the several departments.

SEC. 4. All active members shall pay annual dues of two dollars, and shall be entitled to the volume of *Proceedings* without "coupon" or other conditions.

SEC. 5. The annual membership fee shall be payable at the time of the annual convention, or by remittance to the Secretary before September first of each year.

SEC. 6. Any active member may discontinue membership by giving written notice to the Secretary before September first in any year, and may restore the same only on payment of the enrollment fee of two dollars and the annual dues for the current year. A written application for active membership shall constitute an agreement to continue such membership and pay annual dues, unless written notice of discontinuance is sent to the Secretary before September first of the fiscal year for which such discontinuance shall apply.

CORRESPONDING MEMBERS

SEC. 7. Eminent educators not residing in America may be elected by the Board of Directors to be corresponding members. The number of corresponding members shall at no time exceed fifty.

SEC. 8. Corresponding members shall be entitled to the volume of *Proceedings* without the payment of fees or other conditions.

ASSOCIATE MEMBERS

SEC. 9. Any person on paying an annual membership fee of two dollars may become an associate member.

SEC. 10. Associate members may receive the volume of *Proceedings* in accordance with the usual "coupon" conditions, as printed on the membership certificate.

LIFE MEMBERS

SEC. 11. All life members and life directors shall be denominated active members and shall enjoy all the powers and privileges of such members without the payment of annual dues.

ROLL OF MEMBERS

SEC. 12. The names of active, life, and corresponding members only shall be printed in the annual *Yearbook*, with their respective educational titles, offices, and addresses, and the list shall be revised annually by the Secretary of the Association.

ARTICLE II—OFFICERS AND COMMITTEES

SECTION 1. The President, Vice-Presidents, Directors, and Treasurer shall be chosen by the active members of the Association by ballot, unless otherwise ordered, on the third day of each annual session, a majority of the votes cast being necessary to a choice. They shall continue in office until the close of the annual session subsequent to their election and until their successors are chosen, except as hereinafter provided.

COMMITTEE ON RESOLUTIONS

SEC. 2. At the first session of each annual meeting of the Association the President shall appoint a Committee on Resolutions.

COMMITTEE ON NOMINATIONS

SEC. 3. At the third session of each annual meeting of the Association there shall be appointed by the President a Committee on Nominations, consisting of one member from each state and territory represented. Such a committee shall be appointed by the President on the nomination of a majority of the active members from such state or territory present at the meeting called for the purpose of making such nomination; *provided*, however, That such appointment shall be made by the President without such nomination, when the active members in attendance from any state or territory shall fail to make a nomination.

SEC. 4. The meetings of the active members of the several states to nominate members of the nominating committee shall be held at 5:30 P.M. on the first day of the annual meeting of the Association, at such places as shall be announced in the general program.

ARTICLE III—DUTIES OF OFFICERS

THE PRESIDENT

SECTION 1. The President shall preside at all meetings of the Association and of the Board of Directors, and shall perform the duties usually devolving upon a presiding officer. In his absence the first Vice-President in order, who is present, shall preside; and in the absence of all the Vice-Presidents, a *pro tempore* chairman shall be appointed on nomination, the Secretary putting the question.

THE SECRETARY

SEC. 2. The Secretary shall keep a full and accurate report of the proceedings of the general meetings of the Association and of all meetings of the Board of Directors, and shall conduct such correspondence and transact such other business of the Association as the directors or Executive Committee may assign, and shall have his records present at all meetings of the Association and the Board of Directors.

THE TREASURER

SEC. 3. The Treasurer shall receive, and under the direction of the Board of Trustees hold in safekeeping, the current income of the Association; shall expend the same only upon order of said board; shall keep an exact account of his receipts and expenditures, with vouchers for the latter; which accounts, ending the first day of July in each year, he shall render to the Board of Trustees and, when approved by said board, he shall report to the Board of Directors. The Treasurer shall give such bond for the faithful discharge of his duties as may be required by the Board of Trustees; and he shall continue in office until the first meeting of the Board of Directors held prior to the annual meeting of the Association next succeeding that at which he is elected, and until his successor has been elected and has qualified.

AUDITOR OF ACCOUNTS

SEC. 4. It shall be the duty of the President, Secretary, and Treasurer of the Association to appoint annually some competent person to examine the securities of the Permanent Fund held by the Board of Trustees, and his certificate, showing the condition of the said fund, shall be attached to the annual report of the Board of Trustees.

CERTIFICATION OF BILLS

SEC. 5. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.

ARTICLE IV—THE BOARD OF DIRECTORS

SECTION 1. The Board of Directors shall hold its regular annual meeting at the place of the annual convention, and not less than two hours before the assembling of the Association.

SEC. 2. Special meetings may be held at such other times and places as the board or the President shall determine.

SEC. 3. Each new board shall organize at the session of its election.

ARTICLE V—THE NATIONAL COUNCIL OF EDUCATION

OBJECTS AND DUTIES

SECTION 1. The National Council of Education shall have for its object the consideration and discussion of educational questions of public and professional interest; the proposal to the Board of Directors, from time to time, of suitable subjects for investigation and research, and the recommendation of the amount of appropriations that should be made for such purposes; the appointment and general supervision of such special committees of investigation and research as may be provided for and authorized by the Board of Directors of the Association; the consideration, discussion, and recommendation to the Board of Directors for disposition of all reports by such special committees of research as may have been appointed on its recommendation or by its authority; the annual preparation and presentation to the Association at its annual convention of a report on "Educational Progress during the Past Year"; and in other ways shall use its best efforts to further the objects of the Association and to promote the cause of education in general.

MEMBERSHIP OF THE COUNCIL

SEC. 2.* The Council shall consist of one hundred and twenty members, selected from the membership of the Association. Any member of the Association identified with educational work is eligible to membership in the Council.

SEC. 3.* The Board of Directors shall annually elect ten members, and the Council shall elect ten members, each member to serve for six years, or until his successor is elected. At the meeting of 1908 enough additional members shall be elected in the same manner to make the total number of members one hundred and twenty. The terms of the members so elected shall expire as follows: one-sixth in one year, one-sixth in two years, one-sixth in three years, one-sixth in four years, one-sixth in five years, one-sixth in six years.

SEC. 4. The annual election of members of the Council shall be held in connection with the annual meetings of the Association. If the Board of Directors shall fail, for any reason, to fill its quota of members annually, the vacancy or vacancies shall be filled by the Council.

SEC. 5. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership, and the Council shall fill vacancies caused by absence from the Council as herein defined, as well as vacancies

* As amended at meeting of active members held at Cleveland, Ohio, July 1, 1908.

caused by death or resignation, for the unexpired term. All persons who have belonged to the Council shall, on the expiration of their membership, become honorary members, with the privilege of attending its regular sessions and participating in its discussions. No state shall be represented in the Council by more than eight members.

BY-LAWS OF THE COUNCIL

SEC. 6. The Council may establish by-laws for its government not inconsistent with the Act of Incorporation or with the By-Laws of the Association, provided such by-laws shall be submitted to, and approved by, the Board of Directors of the Association before they shall become operative.

ARTICLE VI—DEPARTMENTS

SECTION 1. A department shall consist of those members of the Association who are especially interested in the consideration of a particular group of educational problems. Each department shall be administered by a president, vice-president, secretary, and such other officers as it shall deem necessary to conduct its affairs.

SEC. 2. Each department shall hold its annual meeting at the time of the annual convention of the Association, except the Department of Superintendence, which may hold its annual meeting in February of each year, or at such other time as may be determined by the officers of said department.

SEC. 3. The objects of the annual department meetings shall be the discussion of questions pertaining to their respective fields of educational work. The programs of these meetings shall be organized and conducted by the respective presidents, in conference with, and under the general direction of, the President of the Association. Each department shall be limited to two sessions, with formal programs, at the time of the annual convention, except that a third session for business or informal round-table conference may be held at the discretion of the department officers.

SEC. 4. Upon the written request of twenty active members of the Association for permission to establish a new department, the Board of Directors may grant such permission. Such new department shall in all respects be entitled to the same rights and privileges as the departments named in the Act of Incorporation.

ARTICLE VII—MEETINGS

SECTION 1. The annual meeting of the Association shall be held at such time and place as shall be determined by the Board of Directors.

SEC. 2. Special meetings may be called by the President at the request of five directors.

SEC. 3. Any department of the Association may hold a special meeting at such time and place as by its own regulations it shall appoint.

SEC. 4. No paper, lecture, or address shall be read before the Association or any of its departments, in the absence of its author, nor shall any such paper, lecture, or address be published in the volume of *Proceedings*, without the consent of the Association, upon the approval of the Executive Committee.

ARTICLE VIII—AMENDMENTS

SECTION 1. These by-laws may be altered or amended at any annual meeting by the unanimous vote of the members present; or by a two-thirds vote of the members present, *provided*, That the substance of the alteration or amendment has been proposed in writing at a previous annual meeting.

NATIONAL EDUCATIONAL ASSOCIATION

NOW KNOWN AS THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

CERTIFICATE

of Acceptance of Charter and Adoption of By-Laws under Act of Congress approved June 30, 1906.

We, the undersigned, Nathan C. Schaeffer, the presiding officer, and Irwin Shepard, the secretary of the meeting of the National Educational Association held at Los Angeles, California, on the 10th day of July, 1907, said meeting being the annual meeting of the Association held next after the passage of an Act of Congress entitled "An Act to Incorporate the National Education Association of the United States,"

Do hereby certify, that at said meeting held pursuant to due notice, a quorum being present, the said Association adopted resolutions of which true copies are hereto attached, and accepted the Charter of the National Education Association of the United States, granted by said Act of Congress, and adopted by-laws as provided in said act and elected officers; and the undersigned pursuant to said resolutions

Do hereby certify that the National Education Association of the United States has duly accepted said Charter granted by said Act of Congress, and adopted by-laws, and is the lawful successor to the National Educational Association.

In witness whereof, we have hereunto signed our names this 20th day of August, 1907.

NATHAN C. SCHAEFFER, *Presiding Officer*
IRWIN SHEPARD, *Secretary*

VERIFICATION

RESOLUTIONS ADOPTED BY THE ACTIVE MEMBERS, JULY 10, 1907

1. *Resolved*, That the National Educational Association hereby accepts the Charter granted by an act of Congress entitled "An Act to Incorporate the National Education Association of the United States," passed June 30, 1906, and that the President and Secretary of this meeting be authorized and directed to execute and file with the Recorder of Deeds of the District of Columbia a verified certificate showing the acceptance by the Association of the Charter granted by said act.

2. *Resolved*, That the proposed by-laws of which notice was given at the annual meeting of the Association held on July 6, 1905, which are printed in full in the journal of said meeting, be and the same are hereby adopted to take effect immediately.

3. *Resolved*, That the Association adopt as its corporate seal a circle containing the title "National Education Association of the United States," and the dates "1857–1907."

4. *Resolved*, That the Association do now proceed to elect officers, and to organize under the Charter granted by the Act of Congress.

Filed in the office of the Recorder of Deeds of the District of Columbia, September 4, 1907.

CALENDAR OF MEETINGS

NATIONAL TEACHERS ASSOCIATION

1857—PHILADELPHIA, PA. (Organized)
James L. Enos, Chairman.
W. E. Sheldon, Secretary.

1858—CINCINNATI, OHIO
Z. Richards, President.
J. W. Bulkley, Secretary.
A. J. Rickoff, Treasurer.

1859—WASHINGTON, D.C.
A. J. Rickoff, President.
J. W. Bulkley, Secretary.
C. S. Pennell, Treasurer.

1860—BUFFALO, N.Y.
J. W. Bulkley, President.
Z. Richards, Secretary.
O. C. Wight, Treasurer.

1861, 1862—No session.

1863—CHICAGO, ILL.
John D. Philbrick, President.
James Cruikshank, Secretary.
O. C. Wight, Treasurer.

1864—OGDENSBURG, N.Y.
W. H. Wells, President.
David N. Camp, Secretary.
Z. Richards, Treasurer.

1865—HARRISBURG, PA.
S. S. Greene, President.
W. E. Sheldon, Secretary.
Z. Richards, Treasurer.

1866—INDIANAPOLIS, IND.
J. P. Wickersham, President.
S. H. White, Secretary.
S. P. Bates, Treasurer.

1867—No session.

1868—NASHVILLE, TENN.
J. M. Gregory, President.
L. Van Bokkelen, Secretary.
James Cruikshank, Treasurer.

1869—TRENTON, N.J.
L. Van Bokkelen, President.
W. E. Crosby, Secretary.
A. L. Barber, Treasurer.

1870—CLEVELAND, OHIO
Daniel B. Hagar, President.
A. P. Marble, Secretary.
W. E. Crosby, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATIONAL ASSOCIATION

1871—ST. LOUIS, MO.
J. L. Pickard, President.
W. E. Crosby, Secretary.
John Hancock, Treasurer.

1872—BOSTON, MASS.
E. E. White, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1873—ELMIRA, N.Y.
B. G. Northrop, President.
S. H. White, Secretary.
John Hancock, Treasurer.

1874—DETROIT, MICH.
S. H. White, President.
A. P. Marble, Secretary.
John Hancock, Treasurer.

1875—MINNEAPOLIS, MINN.
W. T. Harris, President.
M. R. Abbott, Secretary.
A. P. Marble, Treasurer.

1876—BALTIMORE, MD.
W. F. Phelps, President.
W. D. Henkle, Secretary.
A. P. Marble, Treasurer.

1877—LOUISVILLE, KY.
M. A. Newell, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1878—No session.

1879—PHILADELPHIA, PA.
John Hancock, President.
W. D. Henkle, Secretary.
J. Ormond Wilson, Treasurer.

1880—CHAUTAUQUA, N.Y.
J. Ormond Wilson, President.
W. D. Henkle, Secretary.
E. T. Tappan, Treasurer.

1881—ATLANTA, GA.
James H. Smart, President.
W. D. Henkle, Secretary.
E. T. Tappan, Treasurer.

1882—SARATOGA SPRINGS, N.Y.
G. J. Orr, President.
W. E. Sheldon, Secretary.
H. S. Tarbell, Treasurer.

1883—SARATOGA SPRINGS, N.Y.
E. T. Tappan, President.
W. E. Sheldon, Secretary.
N. A. Calkins, Treasurer.

1884—MADISON, WIS.
THOMAS W. BICKNELL, President.
H. S. TARBELL, Secretary.
N. A. CALKINS, Treasurer.

1885—SARATOGA SPRINGS, N.Y.
F. LOUIS SOLDAN, President.
W. E. SHELDON, Secretary.
N. A. CALKINS, Treasurer.

1886—TOPEKA, KANS.
N. A. CALKINS, President.
W. E. SHELDON, Secretary.
E. C. HEWETT, Treasurer.

1887—CHICAGO, ILL.
W. E. SHELDON, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.

1888—SAN FRANCISCO, CAL.
AARON GOVE, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.

1889—NASHVILLE, TENN.
ALBERT P. MARBLE, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.

1890—ST. PAUL, MINN.
J. H. CANFIELD, President.
W. R. GARRETT, Secretary.
E. C. HEWETT, Treasurer.

1891—TORONTO, ONT.
W. R. GARRETT, President.
E. H. COOK, Secretary.
J. M. GREENWOOD, Treasurer.

1892—SARATOGA SPRINGS, N.Y.
E. H. COOK, President.
R. W. STEVENSON, Secretary.
J. M. GREENWOOD, Treasurer.

1893—CHICAGO, ILL.
(International Congress of Education)
ALBERT G. LANE, President
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.

1894—ASBURY PARK, N.J.
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.

1895—DENVER, COLO.
NICHOLAS MURRAY BUTLER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1896—BUFFALO, N.Y.
NEWTON C. DOUGHERTY, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1897—MILWAUKEE, WIS.
CHARLES R. SKINNER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1898—WASHINGTON, D.C.
J. M. GREENWOOD, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1899—LOS ANGELES, CAL.
E. ORAM LYTE, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.

1900—CHARLESTON, S.C.
OSCAR T. CORSON, President.
IRWIN SHEPARD, Secretary.
CARROLL G. PEARSE, Treasurer.

1901—DETROIT, MICH.
JAMES M. GREEN, President.
IRWIN SHEPARD, Secretary.
L. C. GREENLEE, Treasurer.

1902—MINNEAPOLIS, MINN.
WILLIAM M. BEARDSHEAR, President.
IRWIN SHEPARD, Secretary.
CHARLES H. KEYES, Treasurer.

1903—BOSTON, MASS.
CHARLES W. ELIOT, President.
IRWIN SHEPARD, Secretary.
W. M. DAVIDSON, Treasurer.

1904—ST. LOUIS, MO.
JOHN W. COOK, President.
IRWIN SHEPARD, Secretary.
MCHENRY RHOADS, Treasurer.

1905—ASBURY PARK AND OCEAN GROVE, N. J
WILLIAM H. MAXWELL, President.
IRWIN SHEPARD, Secretary.
JAMES W. CRABTREE, Treasurer.

1906—No session.

1907—LOS ANGELES, CAL.
NATHAN C. SCHAEFFER, President.
IRWIN SHEPARD, Secretary.
J. N. WILKINSON, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

1908—CLEVELAND, OHIO
EDWIN G. COOLEY, President.
IRWIN SHEPARD, Secretary.
ARTHUR H. CHAMBERLAIN, Treasurer.

1909—DENVER, COLO.
LORENZO D. HARVEY, President.
IRWIN SHEPARD, Secretary.
ARTHUR H. CHAMBERLAIN, Treasurer.

1910—BOSTON, MASS.
JAMES Y. JOYNER, President.
IRWIN SHEPARD, Secretary.
ARTHUR H. CHAMBERLAIN, Treasurer.

1911—SAN FRANCISCO, CAL.
ELLA FLAGG YOUNG, President.
IRWIN SHEPARD, Secretary.
DURAND W. SPRINGER, Treasurer.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

OFFICERS FOR 1910–11

GENERAL ASSOCIATION

Ella Flagg Young	*President*	Chicago, Ill.
Irwin Shepard	*Secretary*	Winona, Minn.
Durand W. Springer	*Treasurer*	Detroit, Mich.

VICE-PRESIDENTS

James Y. Joyner, State Superintendent of Public Instruction	Raleigh, N.C.
Julia Richman, District Superintendent of City Schools	New York, N.Y.
Fayette L. Cook, President, South Dakota State Normal School	Spearfish, S.Dak.
George A. McFarland, Principal, State Normal School	Valley City, N.Dak.
Thomas C. Miller, Principal of Shepherd College	Shepherdstown, W.Va.
Charles S. Foos, Superintendent of Schools	Reading, Pa.
Homer H. Seerley, President, Iowa State Teachers College	Cedar Falls, Iowa
Franklin O. Hays, Superintendent of Schools	Alva, Okla.
Edward T. Fairchild, State Superintendent of Public Instruction	Topeka, Kans.
Samuel Avery, Chancellor, University of Nebraska	Lincoln, Nebr.
C. A. Duniway, President, University of Montana	Missoula, Mont.

BOARD OF TRUSTEES

Henry B. Brown	Valparaiso, Ind.	Term expires 1911
Carroll G. Pearse	Milwaukee, Wis.	Term expires 1912
James M. Greenwood, *Secretary*	Kansas City, Mo.	Term expires 1913
Nicholas Murray Butler, *Chairman*	New York, N.Y.	Term expires 1914
Ella Flagg Young	Chicago, Ill.	*Ex officio*

EXECUTIVE COMMITTEE

Ella Flagg Young	*President*	Chicago, Ill.
James Y. Joyner	*First Vice-President*	Raleigh, N.C.
Durand W. Springer	*Treasurer*	Detroit, Mich.
Nicholas Murray Butler	*Chairman, Board of Trustees*	New York, N.Y.
John H. Phillips	*Member by Election*	Birmingham, Ala.

Irwin Shepard	*Secretary*	Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

Ella Flagg Young, Chicago, Ill.
James Y. Joyner, Raleigh, N.C.
Durand W. Springer, Detroit, Mich.
Nicholas Murray Butler, New York, N.Y.
Irwin Shepard, Winona, Minn.

Life Directors

Bicknell, Thomas W., Providence, R.I.
Board of Education, Nashville, Tenn.
Brown, Elmer Ellsworth, Washington, D.C.
Butler, Nicholas Murray, New York, N.Y.
Cook, John W., DeKalb, Ill.
Cooley, Edwin G., LaGrange, Ill.
Corson, Oscar T., Columbus, Ohio.
Eliot, Charles W., Cambridge, Mass.
Gove, Aaron, Denver, Colo.
Graham, H. A., Mt. Pleasant, Mich.
Green, James M., Trenton, N.J.
Greenwood, James M., Kansas City, Mo.
Harvey, Lorenzo D., Menomonie, Wis.
Jewett, A. V., Abilene, Kans.
Joyner, James Y., Raleigh, N.C.
Lyte, Eliphalet Oram, Millersville, Pa.
Marshall, T. Marcellus, Stouts Mills, W.Va.
Maxwell, William H., New York, N.Y.
Parker, Charles I., Chicago, Ill.
Pickard, Josiah L., Cupertino, Cal.

PIKE, JOSHUA, Jerseyville, Ill.
SCHAEFFER, NATHAN C., Harrisburg, Pa.
SKINNER, CHARLES R., New York, N.Y.
STATE TEACHERS ASSOCIATION OF ILLINOIS
TAYLOR, A. R., Decatur, Ill.
TEACHERS INSTITUTE, Philadelphia, Pa.
WHITE, CHARLES G., Lake Linden, Mich.
*WILSON, J. ORMOND, Washington, D.C.

Directors by Election

Alabama	JOHN W. ABERCROMBIE, President, University of Alabama	University
Arizona	A. J. MATTHEWS, President, Territorial Normal School	Tempe
Arkansas	GEORGE B. COOK, State Superintendent of Public Instruction	Little Rock
California	DUNCAN MACKINNON, Superintendent of Schools	San Diego
Colorado	CHARLES E. CHADSEY, Superintendent of Schools	Denver
Connecticut	FREDERICK A. VERPLANCK, Superintendent of Schools	So. Manchester
Delaware	GEORGE W. TWITMYER, Superintendent of Schools	Wilmington
Dist. of Col.	P. M. HUGHES, Assistant Superintendent of Public Schools	Washington
Florida	MISS CLEM HAMPTON, State Department of Education	Tallahassee
Georgia	MRS. F. S. WHITESIDE, 46 Columbia Avenue	Atlanta
Idaho	CHARLES S. MEEK, Superintendent of Schools	Boise
Illinois	J. STANLEY BROWN, Principal of High School	Joliet
Indiana	THOMAS A. MOTT, Superintendent of Schools	Richmond
Iowa	O. P. BOSTWICK, Superintendent of Schools	Clinton
Kansas	JOHN MACDONALD, Editor, *Western School Journal*	Topeka
Kentucky	W. H. BARTHOLOMEW, Principal, Girls' High School	Louisville
Louisiana	MISS MARY STEVENS, Teacher of English, Ouachita Parish H.S.	Stevensdale
Maine	PAYSON SMITH, State Superintendent of Public Schools	Augusta
Maryland	A. C. WILLISON, County Superintendent of Schools	Cumberland
Massachusetts	IRVING O. PALMER, High School	Newtonville
Michigan	E. E. SCRIBNER, Superintendent of Schools	Ishpeming
Minnesota	S. L. HEETER, Superintendent of Schools	St. Paul
Mississippi	E. E. BASS, Superintendent of Schools	Greenville
Missouri	HOWARD A. GASS, Editor, *Missouri School Journal*	Jefferson City
Montana	JAMES M. HAMILTON, President, Montana Agricultural College	Bozeman
Nebraska	A. A. REED, Professor of Sec. Education, Univ. of Nebraska	Lincoln
Nevada	MRS. L. C. BOOTH, 421 Sierra Street	Reno
New Hampshire	HENRY C. MORRISON, State Superintendent of Public Instruction.	Concord
New Jersey	M. H. KINSLEY, Superintendent of County Schools	Hoboken
New Mexico	JAMES E. CLARK, Territorial Superintendent of Public Instruction.	Santa Fe
New York	AUGUSTUS S. DOWNING, First Assistant Commissioner of Education	Albany
North Carolina	W. S. SNIPES, Superintendent of Schools	Fayetteville
North Dakota	NELSON SAUVAIN, Superintendent of Schools	Casselton
Ohio	JOHN W. ZELLER, State Commissioner of Common Schools	Columbus
Oklahoma	W. C. CANTERBURY, Superintendent of Schools	Marietta
Oregon	EDWIN D. RESSLER, Professor, Oregon Agri. College	Corvallis
Pennsylvania	REED B. TEITRICK, Deputy Superintendent of Public Instruction.	Harrisburg
Rhode Island	GEORGE F. WESTON, Principal of High School	Providence
South Carolina	D. B. JOHNSON, President, Winthrop Nor. and Indust. College	Rock Hill
South Dakota	FREEMAN H. HOFF, Superintendent of Schools	Mitchell
Tennessee	J. J. KEYES, Superintendent of Schools	Nashville
Texas	GEORGE H. CARPENTER, Superintendent of Schools	Brownwood
Utah	G. N. CHILD, Supervisor of Schools	Salt Lake City
Vermont	MASON S. STONE, State Superintendent of Education	Montpelier
Virginia	JOSEPH D. EGGLESTON, State Superintendent of Public Instruction	Richmond
Washington	HENRY B. DEWEY, State Superintendent of Public Instruction	Olympia
West Virginia	MORRIS P. SHAWKEY, State Superintendent of Schools	Charleston
Wisconsin	CARROLL G. PEARSE, Superintendent of Schools	Milwaukee
Wyoming	A. D. COOK, State Superintendent of Public Instruction	Cheyenne
Hawaii	PERLEY L. HORNE, President, Kamehameha Schools	Honolulu

DEPARTMENT OFFICERS

National Council

President	CHARLES H. KEYES, Ex. Sec. Com. on Safety of City of New York	New York, N.Y.
Vice-President	W. M. DAVIDSON, Superintendent of Instruction, Public Schools	Omaha, Nebr.
Secretary	JOHN W. CARR, Superintendent of Schools	Bayonne, N.J.
Executive Committee	JOSEPH SWAIN, President of Swarthmore College	Swarthmore, Pa.
Executive Committee	JAMES M. GREENWOOD, Superintendent of Schools	Kansas City, Mo.
Executive Committee	ELMER ELLSWORTH BROWN, U.S. Com'r of Education	Washington, D.C.

*Died April 2, 1911.

Kindergarten

President	Miss Jane L. Hoxie, Supervisor of Kindergartens	Berkeley, Cal.
Vice-President	Miss Mary E. Gamble, Garfield School Kindergarten	East Oakland, Cal.
Secretary	Miss Harriet E. Huggins, Director Kindergarten Training Class	Oakland, Cal.

Elementary

President	Miss Adelaide Steele Baylor, Superintendent of Schools	Wabash, Ind.
Vice-President	H. B. Wilson, Superintendent of Schools	Decatur, Ill.
Secretary	Miss Nellie O'Keefe, Principal, McClellan School	St. Paul, Minn.

Secondary

President	H. M. Barrett, Principal of High School	Pueblo, Colo.
Vice-President	Walter F. Lewis, Superintendent of Schools	Port Huron, Mich.
Secretary	Thomas J. McCormack, Principal, LaSalle-Peru T'w'p High School	LaSalle, Ill.

Higher

President	James H. Baker, President, University of Colorado	Boulder, Colo.
Vice-President	J. A. McLean, President, University of Idaho	Moscow, Idaho
Secretary	Frederick P. Keppel, Dean, Columbia College	New York. N.Y.

Normal

President	David B. Johnson, President, Winthrop Nor. and Indust. College	Rock Hill, S.C.
Vice-President	William J. Hawkins, President, State Normal School	Warrensburg, Mo.
Secretary	Guy E. Maxwell, President, State Normal School	Winona, Minn.

Superintendence

President	W. M. Davidson, Superintendent of Instruction	Omaha, Nebr.
First Vice-Pres	J. A. Shawan, Superintendent of Schools	Columbus, Ohio
Second Vice-Pres	C. G. Schulz, State Superintendent of Public Instruction	St. Paul, Minn.
Secretary	Arthur D. Call, Supervising Principal of Schools	Hartford, Conn.

Manual Training and Art

President	Clifford B. Connelley, Dean, Carnegie Technical Schools	Pittsburgh, Pa.
Vice-President	*Mrs. Ellen H. Richards, Massachusetts Institute of Tech	Boston, Mass.
Secretary	Miss May Gearhart, Supervisor of Drawing	Los Angeles, Cal.

Music

President	Miss Elsie M. Shawe, Supervisor of Music	St. Paul, Minn.
Vice-President	C. A. Fullerton, Professor of Music, State Normal School	Cedar Falls, Ia.
Secretary	Miss Estelle Carpenter, Supervisor of Music	San Francisco, Cal.

Business

President	Frank E. Lakey, English High School	Boston, Mass.
Vice-President	W. S. McKinney, Englewood High School	Chicago, Ill.
Secretary	Sherwin W. Cody, Author of Educational Textbooks	Chicago, Ill.

Child-Study

President	Will Grant Chambers, Dean, Sch. of Educ., Univ. of Pittsburgh	Pittsburgh, Pa.
Vice-President	Louis M. Terman, Professor of Education, Leland Stanford Jr. Univ.	Palo Alto, Cal.
Secretary	C. B. Robertson, Superintendent of Training School	Cortland, N.Y.

Physical

President	Clark W. Hetherington, Joseph Fels Fellowship, Univ. of Chicago	Chicago, Ill.
Vice-President	Miss Amy Morris Homans, Dept. of Phys. Educ., Wellesley College	Wellesley, Mass.
Secretary	Miss Clara G. Baer, Dept. of Phys. Educ., Sophie Newcomb Coll.	New Orleans, La.

Science

President	George A. Cowen, West Roxbury High School	Boston, Mass.
Vice-President	W. J. V. Osterhaut, Professor, Harvard University	Cambridge, Mass.
Secretary	Harry T. Clifton, Throop Polytechnic Institute	Pasadena, Cal.

School Administration

President	Linnaeus N. Hines, Superintendent of Schools	Crawfordsville, Ind.
Vice-President	Willard S. Small, Principal, Eastern High School	Washington, D.C.
Secretary	William G. Bruce, Editor, *American School Board Journal*	Milwaukee, Wis.

*Died March 30, 1911.

Library

President	EDWIN WHITE GAILLARD, Supvr. of Work with Schools, Pub. Lib.	New York, N.Y.
Vice-President	JAMES LOUIS GILLIS, Librarian, California State Library	Sacramento, Cal.
Secretary	GILBERT O. WARD, Librarian, Technical High School	Cleveland, Ohio

Special

President	FRANK G. BRUNER, Department of Child Study, Public Schools	Chicago, Ill.
Vice-President	ELIZABETH E. FARRELL, Insp'r of Ungraded Classes, Pub. Schools	New York, N.Y.
Secretary	EDWARD ALLEN FAY, Vice-President, Gallaudet College	Washington, D.C.

School Patrons

President	MRS. O. SHEPARD BARNUM, Principal Academic Dept., Cumnock Sch.	Los Angeles, Cal.
Vice-President	MRS. HUGO ROSENBERG, President of Council of Jewish Women	Pittsburgh, Pa.
Secretary	MRS. ORVILLE T. BRIGHT, President of Illinois Congress of Mothers	Chicago, Ill.

Rural and Agricultural

President	JAMES A. BARR, Superintendent of Schools	Stockton, Cal.
Vice-President	B. M. DAVIS, Professor of Agricultural Educ., Miami University	Oxford, Ohio
Secretary	ERNEST E. BALCOMB, State Normal School	Providence, R.I.

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

OFFICERS FOR 1911–12

GENERAL ASSOCIATION

Carroll G. Pearse	*President*	Milwaukee, Wis.
Irwin Shepard	*Secretary*	Winona, Minn.
Katherine D. Blake	*Treasurer*	New York, N.Y.

VICE-PRESIDENTS

Ella Flagg Young, Superintendent of Schools	Chicago, Ill.
George H. Carpenter, Superintendent of Schools	Brownwood, Tex.
Charles F. Philbrook, Superintendent of Schools	Bisbee, Ariz.
Helen Marsh Wixson, State Superintendent of Public Instruction	Denver, Colo.
Samuel Andrews, Superintendent of Schools	Pittsburgh, Pa.
R. H. Wilson, State Superintendent of Public Instruction	Oklahoma City, Okla.
S. S. Stockwell, Superintendent of Schools	Cheyenne, Wyo.
Edwin D. Ressler, State Agricultural College	Corvallis, Ore.
Edward Hyatt, State Superintendent of Public Instruction	Sacramento, Cal.
Vaughan MacCaughey, Territorial Normal School	Honolulu, H.I.
James Y. Joyner, State Superintendent of Public Instruction	Raleigh, N.C.

BOARD OF TRUSTEES

James Y. Joyner	Raleigh, N.C.	Term expires 1912
James M. Greenwood, *Chairman*	Kansas City, Mo.	Term expires 1913
J. Stanley Brown	Joliet, Ill.	Term expires 1914
Robert J. Aley, *Secretary*	Orono, Me.	Term expires 1915
Carroll G. Pearse	Milwaukee, Wis.	*Ex officio*

EXECUTIVE COMMITTEE

Carroll G. Pearse	*President*	Milwaukee, Wis.
Ella Flagg Young	*First Vice-President*	Chicago, Ill.
Katherine D. Blake	*Treasurer*	New York, N.Y.
James M. Greenwood	*Chairman, Board of Trustees*	Kansas City, Mo.
John H. Phillips	*Member by Election*	Birmingham, Ala.
Irwin Shepard	*Secretary*	Winona, Minn.

BOARD OF DIRECTORS

Directors ex officio

Carroll G. Pearse, Milwaukee, Wis.
Ella Flagg Young, Chicago, Ill.
Katherine D. Blake, New York, N.Y.
James M. Greenwood, Kansas City, Mo.
Irwin Shepard, Winona, Minn.

Life Directors

Bicknell, Thomas W., Providence, R.I.
Board of Education, Nashville, Tenn.
Brown, Elmer Ellsworth, New York, N.Y.
Butler, Nicholas Murray, New York, N.Y.
Claxton, P. P., Washington, D.C.
Cook, John W., DeKalb, Ill.
Cooley, Edwin G., Chicago, Ill.
Corson, Oscar T., Columbus, Ohio
Eliot, Charles W., Cambridge, Mass.
Gove, Aaron, Denver, Colo.
Graham, H. A., Mt. Pleasant, Mich.
Green, James M., Trenton, N.J.
Greenwood, James M., Kansas City, Mo.
Harvey, Lorenzo D., Menomonie, Wis.
Jewett, A. V., Abilene, Kans.
Joyner, James Y., Raleigh, N.C.
Lyte, Eliphalet Oram, Millersville, Pa.
Marshall, T. Marcellus, Stouts Mills, W.Va.
Maxwell, William H., New York, N.Y.
Parker, Charles I., Chicago, Ill.
Pickard, Josiah L., Cupertino, Cal.
Pike, Joshua, Jerseyville, Ill.

SCHAEFFER, NATHAN C., Harrisburg, Pa.
SKINNER, CHARLES R., New York, N.Y.
STATE TEACHERS ASSOCIATION OF ILLINOIS
TAYLOR, A. R., Decatur, Ill.
TEACHERS INSTITUTE, Philadelphia, Pa.
WHITE, CHARLES G., Lake Linden, Mich.
YOUNG, ELLA FLAGG, Chicago, Ill.

Directors by Election

Alabama	JOHN H. PHILLIPS, Superintendent of Schools	Birmingham
Arizona	A. J. MATTHEWS, President, Territorial Normal School	Tempe
Arkansas	GEORGE B. COOK, State Superintendent of Public Instruction.	Little Rock
California	MARK KEPPEL, County Superintendent of Schools	Los Angeles
Colorado	JAMES B. RAGAN, Principal of High School	Sterling
Connecticut	FREDERICK A. VERPLANCK, Superintendent of Schools	So. Manchester
Delaware	GEORGE W. TWITMYER, Superintendent of Schools	Wilmington
Dist. of Col	WILLIAM M. DAVIDSON, Superintendent of Schools	Washington
Florida	MISS CLEM HAMPTON, State Department of Education	Tallahassee
Georgia	MRS. F. S. WHITESIDE, 46 Columbia Avenue	Atlanta
Idaho	GRACE M. SHEPHERD, State Supt. of Public Instruction	Boise
Illinois	WILLIAM H. CAMPBELL, Principal, Wentworth School	Chicago
Indiana	THOMAS A. MOTT, Superintendent of Schools	Richmond
Iowa	O. P. BOSTWICK, Superintendent of Schools	Clinton
Kansas	JOHN MACDONALD, Editor, *Western School Journal*	Topeka
Kentucky	W. P. KING, Superintendent of Schools	Bellevue
Louisiana	THOMAS D. BOYD, President, State University	Baton Rouge
Maine	ROBERT J. ALEY, President, University of Maine	Orono
Maryland	A. C. WILLISON, County Superintendent of Schools	Cumberland
Massachusetts	ROBERT J. FULLER, Superintendent of Schools	North Attleboro
Michigan	E. E. SCRIBNER, Superintendent of Schools	Ishpeming
Minnesota	S. L. HEETER, Superintendent of Schools	St. Paul
Mississippi	E. E. BASS, Superintendent of Schools	Greenville
Missouri	JOHN R. KIRK, President, State Normal School	Kirksville
Montana	C. A. DUNIWAY, President, University of Montana	Missoula
Nebraska	GEORGE W. A. LUCKEY, Professor, University of Nebraska	Lincoln
Nevada	MRS. L. C. BOOTH, Principal, Orvis Ring School	Reno
New Hampshire	HENRY C. MORRISON, State Supt. of Public Instruction	Concord
New Jersey	M. P. E. GROSZMANN, Educational Director, N. S. S. E. E. C.	Plainfield
New Mexico	W. E. GARRISON, President, New Mexico College	Agri. College
New York	GRACE C. STRACHAN, District Superintendent of Schools	Brooklyn
North Carolina	F. M. HARPER, Superintendent of Schools	Raleigh
North Dakota	W. E. HOOVER, Superintendent of Schools	Fargo
Ohio	EDWARD M. VAN CLEVE, Superintendent, School for the Blind	Columbus
Oklahoma	WILLIAM F. RAMEY, Superintendent of Schools	Chickasha
Oregon	L. R. ALDERMAN, State Superintendent of Public Instruction	Salem
Pennsylvania	REED B. TEITRICK, Deputy Supt. of Public Instruction	Harrisburg
Rhode Island	GEORGE F. WESTON, Principal of High School	Providence
South Carolina	DAVID B. JOHNSON, President, Winthrop College	Rock Hill
South Dakota	M. M. RAMER, Superintendent of Schools	Pierre
Tennessee	J. J. KEYES, Superintendent of Schools	Nashville
Texas	FELIX E. SMITH, Superintendent of Schools	San Angelo
Utah	GEORGE N. CHILD, Supervisor of Schools	Salt Lake City
Vermont	MASON S. STONE, State Superintendent of Public Instruction.	Montpelier
Virginia	MAURICE M. LYNCH, Superintendent of Schools	Winchester
Washington	C. E. BEACH, Superintendent of Schools	Olympia
West Virginia	M. P. SHAWKEY, State Superintendent of Public Instruction	Charleston
Wisconsin	EMMA J. GARDNER, Vice-Principal, 12th District School No. 2.	Milwaukee
Wyoming	C. O. MERICA, President, University of Wyoming	Laramie
Hawaii	WILLIS T. POPE, Superintendent of Public Instruction	Honolulu
Philippine Islands	G. N. ANDERSON, Division Superintendent	Samar, Manila

DEPARTMENT OFFICERS

National Council

President	CHARLES H. KEYES, Ex. Sec., Com. on Safety, City of N.Y.	New York, N.Y.
Vice-President	WILLIAM M. DAVIDSON, Superintendent of Schools	Washington, D.C.
Secretary	ROBERT J. ALEY, President, University of Maine	Orono, Me.
Executive Committee	ELMER ELLSWORTH BROWN, Chancellor, New York University	New York, N.Y.
Executive Committee	JOSEPH SWAIN, President, Swarthmore College	Swarthmore, Pa.
Executive Committee	JAMES M. GREENWOOD, Superintendent of Schools	Kansas City, Mo.

Kindergarten

President	Stella L. Wood, Supt. of Kindergarten, Normal School	Minneapolis, Minn.
Vice-President	Cora English, Superintendent of Public School Kindergarten	Kansas City, Mo.
Secretary	A. Jessie Davis, Kindergarten Director, City Schools	Superior, Wis.

Elementary

President	H. B. Wilson, Superintendent of Schools	Decatur, Ill.
Vice-President	Julian C. Bryant, Principal, Madison School	St. Paul, Minn.
Secretary	Gertrude Longenecker, University of Chicago	Chicago, Ill.

Secondary

President	John Calvin Hanna, Principal of High School	Oak Park, Ill.
Vice-President	Edward L. Brown, Principal, North Side High School	Denver, Colo.
Secretary	Clarence D. Kingsley, Manual Training High School	Brooklyn, N.Y.

Higher

President	Samuel Avery, Chancellor, University of Nebraska	Lincoln, Nebr.
Vice-President	John H. T. Main, President, Iowa College	Grinnell, Iowa
Secretary	Fletcher Harper Swift, University of Minnesota	Minneapolis, Minn.

Normal

President	W. J. Hawkins, President, State Normal School	Warrensburg, Mo.
Vice-President	A. J. Matthews, President, Territorial Normal School	Tempe, Ariz.
Secretary	Martha Buck, Southern Illinois State Normal School	Carbondale, Ill.

Superintendence

President	Charles E. Chadsey, Superintendent of Schools	Denver, Colo.
First Vice-President	O. J. Kern, County Superintendent of Schools	Rockford, Ill.
Second Vice-President	H. J. Willingham, State Superintendent of Public Instruction	Montgomery, Ala.
Secretary	Harlan Updegraff, Bureau of Education	Washington, D.C.

Manual and Art

President	Clifford B. Connelley, Carnegie Technical Schools	Pittsburgh, Pa.
Vice-President	Isabel Bevier, University of Illinois	Urbana, Ill.
Secretary	W. A. Dunn, Principal, Polytechnic High School	Los Angeles, Cal.

Music

President	C. A. Fullerton, Iowa State Teachers College	Cedar Falls, Iowa.
Vice-President	Julia E. Crane, Normal Institute of Music	Potsdam, N.Y.
Secretary	Arthur G. Wahlberg, Supervisor of Music	Fresno, Cal.

Business

President	Winfield S. McKinney, Commercial Dept., Englewood H.S.	Chicago, Ill.
Vice-President	Charles Hart, Business High School	Washington, D.C.
Secretary	Thomas L. Brecheen, Commercial Dept., Fremont High School	Oakland, Cal.

Child Hygiene

President	William H. Burnham, Professor of Pedagogy, Clark Univ.	Worcester, Mass.
Vice-President	William C. Bagley, School of Education, Univ. of Illinois	Urbana, Ill.
Secretary	Theda Gildemeister, Supervisor of Training, Normal School	Winona, Minn.

Physical

President	Wilber P. Bowen, Prof. of Physical Ed., State Normal School	Ypsilanti, M ch.
Vice-President	George E. Johnson, Prof. of Play, University of Pittsburgh	Pittsburgh, Pa.
Secretary	Blanche Trilling, Asso. Dir. of Phys. Train., Chi. Nor. Sch.	Chicago, Ill.

Science

President	David Starr Jordan, President, Leland Stanford Junior Univ.	Stanford Univ., Cal.
Vice-President	William Orr, Deputy Commissioner of Education	Boston, Mass.
Secretary	H. L. Terry, State High School Inspector	Madison, Wis.

School Administration

President	William A. Wirt, Superintendent of Schools	Gary, Ind.
Vice-President	Harlan Updegraff, Bureau of Education	Washington, D.C.
Secretary	William George Bruce, Editor, *Am. School Board Journal*	Milwaukee, Wis.

Library

President	Edwin White Gaillard, New York Public Library	New York, N.Y.
Vice-President	W. L. Brown, Librarian, Buffalo Public Library	Buffalo, N.Y.
Secretary	Miss M. A. Newberry, Public School Library	Ypsilanti, Mich.

Special

President	John W. Jones, Supt., Ohio State School for the Deaf	Columbus, Ohio
Vice-President	M. P. E. Groszmann, Educational Director, N. S. S. E. E. C.	Plainfield, N.J.
Secretary	Carrie B. Levy, Supervisor of Classes for the Blind	Milwaukee, Wis.

School Patrons

President	Mrs. O. Shepard Barnum, Principal, Cumnock School	Los Angeles, Cal.
Vice-President	Mrs. Wm. S. Hefferan, Ch'n, Edu. Com., Nat. Cong. of Mothers	Chicago, Ill.
Secretary	Katherine E. Dopp, Lecturer, University of Chicago	Chicago, Ill.

Rural and Agricultural

President	Benjamin M. Davis, Professor, Miami University	Oxford, Ohio
Vice-President	Cyril A. Stebbins, University of California	Berkeley, Cal.
Secretary	Ernest E. Balcomb, State Normal and Industrial College	Greensboro, N.C.

TREASURER'S REPORT

OF THE

NATIONAL EDUCATION ASSOCIATION

JULY 1, 1910, TO JUNE 30, 1911

Durand W. Springer, in Account with the National Education Association

BALANCE ON HAND, JULY 1, 1910

Balance brought forward from Treasurer's Report for year ending June 30, 1910			$4,552.05

RECEIPTS

From Annual Meeting:			
Advance enrollment—			
From W. A. Crawford	$ 8,806.00		
Convention registration	17,032.00	$25 838.00	
From Memberships, Mobile Meeting of Department of Superintendence		894.00	
From Secretary's Office during the year:			
Membership fees	$9,123.15		
Enrollment fees	700.00		
Exchange	6.02		
Sale of back volumes	714.98		
Sale of Committee Reports, etc	152.44		
Expressage refunded	12.32		
Convention literature	41.28	$10,750.19	
From interest on Permanent Fund		6,456.78	
From royalty on sale of Reports of Committees of Ten and of Fifteen		44.10	
From interest on deposits in First National Bank of Chicago		373.96	$44,357.03
			$48,909.08

DISBURSEMENTS

Board of Trustees:			
For investment		$9,900.00	
For expenses		228.60	$10,128.60
Executive Committee expenses:			
President		$167.05	
First Vice-President		57.70	
Treasurer		294.77	
Chairman, Board of Trustees		5.91	
Member by election		204.06	$729.49
General Secretary's office:			
Salary of Secretary		$4,000.00	
Postage		2,126.59	
Telegrams		303.69	
Freight and express		74.73	
Clerical services		3,002.55	
Exchange		9.13	
Stationery and office supplies		205.63	
Traveling		520.01	
Rent		600.00	
Carried forward		$10,842.33	$10,858.09

Brought forward		$10,842.33	$10,858.09
Miscellaneous:			
Purchase of volumes		94.25	
Refunds of duplicate enrollments		61.00	
Bonds of Secretary and Treasurer		50.00	
Refunds of expressage on volumes		4.17	
Press clippings		1.05	
Reimbursement of expense in connection with publication of report		.85	
			$11,053.65
Printing:			
Volumes of Proceedings (12,500 copies)	$8,350.01		
Yearbooks (7,200 copies)	1,472.51		
		$9,822.52	
Reprints from volume		32.85	
Special Reports		536.03	
Executive Committee Bulletins		1,493.95	
Miscellaneous (letterheads, blanks, envelopes, etc.)		715.87	
			$12,601.22
Express and freight:			
Distribution of volumes and reports		$4,120.29	
Miscellaneous		168.41	
			$4,288.70
Special Appropriations:			
Committee on Place of Industries		$ 6.50	
Committee on Uniform Statistics		468.13	
			$474.63
Conventions:			
Department of Superintendence:			
Clerical service:			
Registration and typewriting		$189.10	
Badges		75.00	
Printing:			
Programs for convention		$68.00	
Miscellaneous		10.00	
Miscellaneous:			
Rent of desks	$ 10.00		
Expenses of Secretary	29.55		
Expenses of President	104.58		
		$144.13	
Annual Convention:			$486.23
Department expenses		$271.64	
State Directors and Managers		525.00	
Clerical services:			
Registration Bureau	$968.30		
Stenographers and typewriter operators	317.45		
		$1,285.75	
Badges		$1,250.00	
Printing:			
Programs	$826.54		
Miscellaneous	378.88		
		$1,205.42	
Express and freight		12.26	
Stationery		43.75	
Telegrams		25.67	
Miscellaneous:			
Expenses of speaker	$ 65.45		
Stereopticon	15.00		
Sundry expenses	125.66		
		$ 206.11	
			$4,825.60
Unclassified disbursements:			
Auditing books of Secretary and Treasurer		$30.00	
Legal advice		50.00	
Office furniture		59.50	
Press clippings		35.48	
Refunds of irregular enrollment fees		32.00	
Purchase of Reports of Ten and Fifteen		16.70	
Expenses, distribution of volumes in Boston		67.15	
			$290.83
			$44,878.95

SUMMARY

Receipts

Balance brought forward from the Treasurer's report for year ending June 30, 1910	$ 4,552.05	
Receipts for year July 1, 1910, to June 30, 1911	44,357.03	
		$48,909.08

Disbursements

Total expenses for the year	$34,978.95	
Transferred to the Permanent Fund	9,900.00	
		$44,878.95
Balance in treasury, June 30, 1911		$4,030.13

Respectfully submitted,
D. W. SPRINGER

THE INTERNATIONAL AUDIT COMPANY
Merchants' Loan and Trust Building

CHICAGO, July 1, 1911

Board of Trustees, National Education Association of the United States:

GENTLEMEN: We have audited the books and accounts of the National Education Association of the United States, kept by Secretary Irwin Shepard, and Treasurer Durand W. Springer, for the period from 1st July, 1910, to 30th June, 1911, and compared them with the relative vouchers and cheques, and find the books to be correct. We compared the Treasurer's records with those kept by the Secretary and find them to be in accord.

We annex herewith a statement of the Receipts and Disbursements for the period under review, which we have checked with the books. We certify it to be in accordance therewith.

Yours very truly,
THE INTERNATIONAL AUDIT COMPANY,
By JOHN MCLAREN, *President*

TWENTY-FIFTH ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE NATIONAL EDUCATION ASSOCIATION

FOR THE YEAR JULY 1, 1910, TO JUNE 30, 1911

SAN FRANCISCO, CAL., July 8, 1911

To the Board of Directors of the National Education Association:

The Board of Trustees of the National Education Association has the honor to submit its report on the Permanent Fund of the Association for the year ending June 30, 1911.

The amounts collected as income from the Permanent Fund and the disposition made of the income are shown in the following Income Account. The amount of the net income paid to the Treasurer of the Association is $6,456.78.

During the year the sum of $9,900 has been added to the principal of the fund, in accordance with the provisions of Article 7 of the Act of Incorporation. The Fund now amounts to $180,000.

New investments for the fund, as shown in the Principal Account below, are $7,000 Atlantic Coast Line R.R. Co. first consolidated mortgage gold 4 per cent bonds, and $4,000 Manhattan Railway consolidated mortgage gold 4 per cent bonds.

The present state of the investments held for the Permanent Fund is shown below in the Statement of Securities Held for the Permanent Fund, in which each item of the investments is named in detail.

Statement A shows the net income of the property at 4762 Lake Avenue, Chicago, Ill., title to which, as has been noted in earlier reports, was taken by the Trustees in 1907 under proceedings for foreclosure of mortgage. While the expense of carrying this property is large, the Trustees have not yet been able to dispose of it at a satisfactory figure.

The accounts and statements which follow set out in detail the financial operations of the year and the present state of the Permanent Fund:

INCOME ACCOUNT

RECEIPTS

$ 7,000	St. Louis and San Francisco R.R. Co. refunding bonds, 1951, at 4 per cent....	$ 280.00	
15,000	Terminal R.R. Association of St. Louis general refunding bonds, 1953, at 4 per cent	600.00	
20,000	Pittsburg, Lake Erie and West Virginia System refunding bonds, 1941, at 4 per cent	800.00	
10,000	Oregon Short Line R.R. Co. guaranteed refunding bonds, 1929, at 4 per cent.	400.00	
17,000	City of New York registered bonds, 1957, at 4½ per cent	765.00	
2,500	Village of Morgan Park, Ill., gold bonds, 1911 } at 4½ per cent	157.50	
1,000	Village of Morgan Park, Ill., gold bonds, 1912 }		
1,000	Lemont, Ill., school bonds, 1912–13, at 5 per cent	50.00	
10,000	Chicago Sanitary District bonds, 1916 } at 4 per cent	2,000.00	
40,000	Chicago Sanitary District bonds, 1917 }		
9,000	West Chicago, Ill., park bonds, 1918 } at 4 per cent	760.00	
10,000	West Chicago, Ill., park bonds, 1919 }		
10,000	Pennsylvania R.R. Co. convertible bonds, 1915, at 3½ per cent	350.00	
3,000	Atlantic Coast Line R.R. first consolidated bonds, 1952, at 4 per cent	120.00	
10,000	Chicago, Indiana and Southern Railway Co. guaranteed consolidated bonds, 1956, at 4 per cent	400.00	
	Interest on cash balance in First Trust and Savings Bank, Chicago	76.23	
	Net income of property 4762 Lake Avenue, Chicago (see Statement A)	38.98	
			$6,797.71

DISBURSEMENTS

Fee of First Trust and Savings Bank, Chicago, Ill., for care of principal of Permanent Fund	$ 206.88	
Accrued interest on $7,000 Atlantic Coast Line Railroad Co. bonds purchased	73.11	
Accrued interest on $4,000 Manhattan Railway Co. bonds purchased	28.44	
Broker's Commission	5.00	
Commission of the First Trust and Savings Bank on new investments	27.50	
Net income paid to the Treasurer of the National Education Association	6,456.78	
		$6,797.71

PRINCIPAL ACCOUNT

RECEIPTS

Cash on hand for investment June 30, 1910	$1,108.75	
Received from the Treasurer of the National Education Association	9,900.00	
		$11,008.75

DISBURSEMENTS

$7,000	Atlantic Coast Line R.R. Co. first consolidated 4 per cent bonds at 95⅞	$6,711.25	
4,000	Manhattan Railway Co. consolidated 4 per cent bonds at 97½	3,900.00	
	Cash on hand awaiting investment June 30, 1911	397.50	
			$11,008.75

STATEMENT A

RECEIPTS

Rents on 4762 Lake Avenue, Chicago, received by First Trust and Savings Bank, Chicago, Ill	$300.00

DISBURSEMENTS

Taxes for 1910	$104.42	
Special assessment (paving 47th street)	1.93	
Repairs	115.67	
Fee of 5% of First Trust and Savings Bank on $300.00 rents collected	15.00	
Insurance premiums	24.00	
Net income	38.98	
		$300.00

STATEMENT OF SECURITIES HELD FOR THE PERMANENT FUND JUNE 30, 1911

MUNICIPAL AND SCHOOL BONDS

Par Value	Security	Acquired	Interest	Book Value
$ 8,000	City of New York registered gold bonds, due November 1, 1957, Nos. 554 to 561	February 29, 1908	4½% May and Nov.	$ 8,510.00
9,000	City of New York gold bonds, due Nov. 1, 1957, Nos. 26,816 to 26,824	June 12, 1908	4½% May and Nov.	9,810.00
2,500	Village of Morgan Park, Ill., gold bonds, due Nov. 1, 1911, Nos. 1 to 5	1895	4½% May and Nov.	2,500.00
1,000	Village of Morgan Park, Ill., gold bonds, due July 1, 1913, Nos. 4 and 5 Series O		4½% Jan. and July	1,000.00
1,000	Lemont, Ill., school bonds, Nos. 30 and 32, payable $500 Dec. 1, 1912, and Dec. 1, 1913	1897	5% June and Dec.	1,000.00
10,000	Sanitary District of Chicago drainage bonds, Nos. 24,516 to 24,525, due Dec. 1, 1916	1905	4% June and Dec.	10,000.00
40,000	Sanitary District of Chicago drainage bonds, Nos. 24,591 to 24,625, 24,636 to 24,640, due Dec. 1, 1917	1904	4% June and Dec.	40,000.00
9,000	West Chicago park bonds, Nos. 1,101 to 1,109, due April 1, 1918	July 31, 1906	4% April and Oct.	9,045.00
10,000	West Chicago park bonds, Nos. 615, 629–31, 1,243–48, due April 1, 1919	July 31, 1906	4% April and Oct.	10,075.00
$90,500				$91,940.00

RAILROAD BONDS

Par Value	Security	Acquired	Interest	Book Value
$ 7,000	St. Louis and San Francisco R.R. Co. refunding gold bonds, Nos. 47,435, 47,457, 47,537, 49,012, 49,670, 57,373, 57,514, due July 1, 1951.....	January 3, 1907	4% Jan. and July	$ 5,775
15,000	Terminal R.R. Association of St. Louis general refunding sinking fund gold bonds, Nos. 16,311–16,325, due January 1, 1953.....	January 30, 1905	4% Jan. and July	15,050
20,000	Pittsburg, Lake Erie and West Virginia System refunding gold bonds, Nos. 13,496–13,500, 21,236–21,250, due Nov. 1, 1941.....	January 13, 1906	4% May and Nov.	19,942.50
10,000	Oregon Short Line R.R. Co. guaranteed refunding gold bonds, Nos. 4,013–4,017, 4,025–4,027, 4,976, 13,810, due Dec. 1, 1929.....	February 3, 1908	4% June and Dec.	8,895
10,000	Pennsylvania R.R. Co. convertible bonds, Nos. B-22,823 to B-22,838 inclusive, B-27,655, B-27,671, B-27,672 and B-11,258, due Oct. 1, 1915.....	January 11, 1909	3½% June and Dec.	9,500
10,000	Chicago, Indiana and Southern Railway Co. bonds, Nos. 11,386 to 11,394 inclusive, and 13,786, due Jan. 1, 1956.	January 18, 1909	4% Jan. and July	9,500
10,000	Atlantic Coast Line Railroad Co. 1st Cons. bonds Nos. 5,130, 6,494, 11,638, 11,639, 14,335, 14,339, 17,579, 24,601, 37,565, and 50,251 due July 1, 1952.....	{ August 3, 1909 / June 5, 1911 }	4% March and Sept.	9,600.00
4,000	Manhattan Railway Co. Cons. mortgage gold bonds, Nos. 2,843, 6,522, 16,083, and 16,087, due April 1, 1990.....	June 5, 1911	4% April and October	3,900.00
$86,000				$82,162.50

REAL ESTATE

Par Value	Security	Acquired	Interest	Book Value
$5,500	4762 Lake Ave., Chicago, Ill. (Hord property).....	1907	Rent $30 monthly	$5,500

Total $182,000		
	Cash on hand awaiting investment.....	$397.50
	Total of the Permanent Fund	$180,000.00

Respectfully submitted,

NICHOLAS MURRAY BUTLER, *Chairman*
JAMES M. GREENWOOD
HENRY B. BROWN
CARROLL G. PEARSE
Trustees

To the Trustees of the National Education Association:

GENTLEMEN: The above and foregoing is a correct statement of the account of the funds of the National Education Association of the United States as the same appears on the books of this bank.

First Trust and Savings Bank,
Chicago, Ill., June 15, 1911 By LOUIS BOISOT, *Trust Officer*

To the Board of Directors of the National Education Association:

I have this day examined the securities in the foregoing statement made by the Board of Trustees, and find all bonds and securities therein named in the custody of Louis Boisot, Trust Officer of the First Trust and Savings Bank, of Chicago, Ill.

JOHN MCLAREN
Pres. International Audit Co., Chicago, Ill.

Chicago, Ill., June 15, 1911

The above report is approved as correct; not approved as to investment of a trust fund in bonds other than school, municipal, county, state, or national.*

ELLA FLAGG YOUNG,
President, N. E. A., Trustee Ex Officio

San Francisco, Cal., July 10, 1911

*This statement is added on request of Trustee Young and by authority of the Board of Directors (see Minutes, p. 27).

MINUTES OF THE MEETING OF ACTIVE MEMBERS OF THE NATIONAL EDUCATION ASSOCIATION FOR THE YEAR 1910–11

SAN FRANCISCO, CAL., THURSDAY, JULY 13, 1911

The annual meeting of the active members was called to order by President Ella Flagg Young, at the Golden Gate Commandery Hall, Sutter Street, at 12 M., July 13, 1911.

PRESIDENT YOUNG: The first item in the order of business is the reading of the minutes of the last meeting.

SECRETARY SHEPARD: The minutes of the last meeting were printed in the last annual volume and *Yearbook* and have been distributed to all active members. Is it desired that they be read at this time?

On motion it was ordered that the reading of the minutes be dispensed with and that they be approved as printed in the volume and *Yearbook* for 1910.

PRESIDENT YOUNG: The next item in the order of business is the report of the Board of Trustees.

James M. Greenwood, of Kansas City, Mo., vice-chairman of the Board of Trustees, presented the report of the Board of Trustees and explained in detail certain features of the report, showing the care taken in the annual report to give in detail all securities belonging to the permanent fund, with the revenue derived from each security. Special attention was called to the fact that $9,900 had been transferred from the surplus of current funds in the Treasurer's hands to the permanent fund, and that the same had been duly invested in approved securities. This raised the permanent fund to $180,000. The report, which was in printed form, had been previously distributed to all members present. This report showed, in addition to the signatures of four members of the Board of Trustees, the certificate of Mr. Louis Boisot, Trust Officer of the First Trust and Savings Bank of Chicago, as the official custodian of the fund, and of John McLaren, President of the International Audit Company, who had been officially appointed, in accordance with the By-Laws, to examine the funds and securities and to certify as to their integrity.

PRESIDENT YOUNG: Attention is called to the fact that the signature of the President as ex-officio member of the Board of Trustees does not appear with the signatures of the other members. This signature was withheld, not because of any objection to the facts of the report, but because the President thought that the funds should be invested in a different kind of security. To make my point clear, I think that every trust fund should be invested in school, municipal, county, state, or national bonds, altho the interest revenue may be greater from industrial bonds. I indorse the report in all respects excepting as to the investment of the amount added to the permanent fund in industrial bonds.

CHAIRMAN GREENWOOD: As a member of the Board of Trustees, I wish to say that the only money, either in principal or interest, that has ever been lost from the permanent fund is that which was invested in school and municipal bonds.

PRESIDENT YOUNG: That was long ago, before school affairs were so well organized as now.

On motion, duly seconded, it was ordered that the report of the Board of Trustees, with the addition of the statement of the President which had been adopted by the Board of Directors at its meeting on July 10 (see p. 38), be accepted and adopted and printed in the volume of proceedings and *Yearbook* for the current year.

PRESIDENT YOUNG: The report of the Treasurer is next in order.

SECRETARY SHEPARD: The members will find distributed in every seat in the hall copies of both the report of the Treasurer and the report of the Board of Trustees.

DURAND W. SPRINGER, of Detroit, Mich., Treasurer: Since the members have printed copies of the report in hand, it seems hardly necessary to read the report in detail, unless there are some questions to be asked. The members will note that the report bears the certificate of the President of the International Audit Company.

On motion the report of the Treasurer was accepted and adopted and ordered printed.

PRESIDENT YOUNG: The next in order is the report of the Committee on Nominations, by ex-President James Y. Joyner, of North Carolina, chairman.

CHAIRMAN JOYNER:

Madam President and Active Members of the National Education Association:

Your committee begs leave to submit the following report of nominations for officers of this Association for the ensuing year, as agreed upon by said Committee on Nominations at its regular session held at nine o'clock this morning at the St. Francis Hotel:

For *President*	CARROLL G. PEARSE	Wisconsin
For *Treasurer*	DURAND W. SPRINGER	Michigan
For *Vice-Presidents*	ELLA FLAGG YOUNG	Illinois
	GEORGE H. CARPENTER	Texas
	C. F. PHILBROOK	Arizona
	HELEN MARSH WIXSON	Colorado
	SAMUEL ANDREWS	Pennsylvania
	R. H. WILSON	Oklahoma
	S. S. STOCKWELL	Wyoming
	E. D. RESSLER	Oregon
	WOODLAND C. PHILLIPS	Maryland
	EDWARD HYATT	California
	VAUGHAN MACCAUGHEY	Hawaii

And for directors for the states and territories the following:

STATE DIRECTORS

Alabama	JOHN H. PHILLIPS	Birmingham
Arizona	A. J. MATTHEWS	Tempe
Arkansas	GEORGE B. COOK	Little Rock
California	MARK KEPPEL	Los Angeles
Colorado	JAMES B. RAGAN	Sterling
Connecticut	(No nomination)	
Delaware	(No nomination)	
District of Columbia	WILLIAM M. DAVIDSON	Washington
Florida	MISS CLEM HAMPTON	Tallahassee
Georgia	(No nomination)	
Idaho	GRACE M. SHEPHERD	Boise
Illinois	WILLIAM H. CAMPBELL	Chicago
Indiana	THOMAS A. MOTT	Richmond
Iowa	O. P. BOSTWICK	Clinton
Kansas	JOHN MACDONALD	Topeka
Kentucky	W. P. KING	Bellevue
Louisiana	THOMAS D. BOYD	Baton Rouge
Maine	ROBERT J. ALEY	Orono
Maryland	A. C. WILLISON	Cumberland
Massachusetts	ROBERT J. FULLER	North Attleboro
Michigan	E. E. SCRIBNER	Ishpeming
Minnesota	S. L. HEETER	St. Paul
Mississippi	E. E. BASS	Greenville
Missouri	JOHN R. KIRK	Kirksville
Montana	C. A. DUNIWAY	Missoula
Nebraska	GEORGE W. A. LUCKEY	Lincoln
Nevada	MRS. L. C. BOOTH	Reno
New Hampshire	HENRY C. MORRISON	Concord
New Jersey	M. P. E. GROSZMANN	Plainfield
New Mexico	W. E. GARRISON	Agri. College
New York	GRACE C. STRACHAN	Brooklyn

North Carolina	F. M. Harper	Raleigh
North Dakota	(No nomination)	
Ohio	E. M. Van Cleve	Columbus
Oklahoma	William F. Ramey	Chickasha
Oregon	L. R. Alderman	Salem
Pennsylvania	Reed B. Teitrick	Harrisburg
Rhode Island	George F. Weston	Providence
South Carolina	D. B. Johnson	Rock Hill
South Dakota	M. M. Ramer	Pierre
Tennessee	J. J. Keyes	Nashville
Texas	George H. Carpenter	Brownwood
Utah	George N. Child	Salt Lake City
Vermont	Mason S. Stone	Montpelier
Virginia	Maurice M. Lynch	Winchester
Washington	C. E. Beach	Olympia
West Virginia	M. P. Shawkey	Charleston
Wisconsin	Emma J. Gardner	Milwaukee
Wyoming	Charles O. Merica	Laramie
Hawaii	Willis T. Pope	Honolulu
Philippine Islands	G. N. Anderson	Manila
Porto Rico	(No nomination)	

Respectfully submitted,

James Y. Joyner, *Chairman*

M. P. E. Groszmann, *Secretary.*

At the close of the reading of the report, Chairman Joyner called attention to the fact that, thru an oversight, no one had been nominated as twelfth Vice-President.

President Young: I think that should have been James Y. Joyner, of North Carolina.

Chairman Joyner: I appreciate greatly the honor, but having heretofore been honored with the highest gift of the Association, I trust you will let this pass to others who have not enjoyed the honors. As a private in the ranks my services will always be given to the Association.

At this point a motion was made, seconded, and carried, to the effect that the report be amended by inserting the name of James Y. Joyner, of North Carolina, as twelfth Vice-President.

E. E. Scribner, of Michigan: I move that the report of the Committee on Nominations be received, and that the Secretary of the Association be instructed to cast the ballot of the active members present in favor of the nominees therein named as officers for the ensuing year.

This motion was duly seconded.

Henry B. Dewey, of Washington: I move as an amendment to the motion just offered adopting the report of the Committee on Nominations that the name of Miss Katherine D. Blake, of New York City, be substituted for that of Durand W. Springer, of Michigan, as Treasurer.

The motion to amend was duly seconded.

Chairman Joyner: I did not know that this amendment was going to be offered. I heard some talk of it after coming into this hall. I appreciate fully the fact that the women feel that in the report of the nominating committee no recognition has been given them. The matter was threshed out in the committee. I know that you will all agree and understand that coming from the section of the country in which chivalric regard for womanhood beats in the blood of men, I would be too chivalrous not to stand up for the recognition of the women anywhere. I am exceedingly desirous that we should remain in harmony. I stand now and have stood all the while for a fair expression of choice in this and all other matters. This is democracy. I think, however, that, unless there are the very best of reasons, the report of the committee should be adopted. The states and distant localities thru their representatives on the committee should be given consideration and should have some voice in the selection of officers of a national

organization. It should not be made possible, by disregarding the recommendations of such a representative committee, for the particular sections and cities by their larger attendance, on account of their proximity to the meeting-place of the Association, to control the election of its officers. Such a precedent, if established, might finally place the selection of officers of our national organization under the control of any large city and state in which it happened to meet, thereby localizing its officers and its work.

I want to make this suggestion, from myself alone. I have conferred with nobody about it. I want you to know that in the nominating committee I voted for this splendid woman from New York, not because I did not have confidence in Mr. Springer as treasurer; I esteem Mr. Springer very highly, and he has made a most efficient treasurer; but the tie is very strong that binds me to Miss Blake, as she comes from a very distinguished family of North Carolina. I felt furthermore that just recognition of the women in her nomination for treasurer would make for harmony. Now that you understand my personal feelings, and will not misunderstand my motives, I wish to make a suggestion in the interest of harmony. I believe that it would be to the future interest of the Association, and I want to urge that we act in harmony in this matter. The papers have designated us as the "Old Guard" and the "Insurgents." I do not think we should have these names. I do not think there is any disposition to withhold recognition from the women. All must realize that they represent the majority, the rank and file, of the teachers of the United States, and I would suggest that we give them recognition by electing Miss Blake unanimously a member of the Board of Trustees. I hope that this will be done. I am in thoro sympathy with the women. The trusteeship is one of the most important offices in the organization. I think we should have a woman on that board, and I now declare that I will do all in my power for her election. I believe that the Board of Directors will recognize the wisdom and the justice of it and elect her unanimously, and I feel sure that this course will contribute to harmony and help the National Education Association, whose highest interest it is our first duty as loyal members to serve and protect. The wisest democracy recognizes the rights of the minority as well as those of the majority.

The motion on the amendment by Mr. Dewey was then presented, and as the Chair was unable to decide the vote, tellers were appointed to count the vote as follows: For those voting in favor of the amendment, Messrs. Baldwin, Crabtree, Gardner, Dewey, Miss Moody, and Mrs. Moriarty; for those voting against the amendment, Messrs. Scribner, Greenwood, Keyes, Heaton, Brown, and Miss Hampton.

Mr. Springer: Madam President, permit me to offer a statement. During the past year that I have been Treasurer of this Association I have had an eye single to the good of this organization. I now believe, as I have always believed, that the National Education Association is larger than any individual. I do not believe that it is wise to introduce a contest in the election of a person to fill that office. I therefore, in the interest of harmony, respectfully request the privilege of withdrawing my name as a candidate for the office of Treasurer for the ensuing year, and request those who voted against the motion to amend to join now in the amendment, substituting the name of Miss Katherine D. Blake, of New York, for my own.

John R. Kirk, of Missouri: I move that the motion be decided by a standing vote.

The motion to amend as made by Mr. Dewey was presented to the house for a second time and was declared carried.

Mr. Kirk: I now move that the report of the Committee on Nominations as amended, substituting the name of Miss Katherine D. Blake, of New York, for that of Mr. Durand W. Springer, of Michigan, be adopted, and that the Secretary be instructed to cast the ballot for the report of the Committee on Nominations as amended.

Miss Elizabeth Shirley, of California: Madam President, I wish to offer a motion to further amend the report of the Committee on Nominations by substituting the name of Mr. A. E. Winship, of Massachusetts, for that of Carroll G. Pearse, of Wisconsin.

A. E. WINSHIP, of Massachusetts: Madam President, I desire to say that the amendment which has just been offered has not been made with my knowledge or consent and I beg leave to request that it be given no consideration.

The motion as made by Miss Shirley receiving no second, the motion of Mr. Kirk was then presented and adopted.

SECRETARY SHEPARD: The ballot has been cast in accordance with the instructions of the motion just passed.

PRESIDENT YOUNG: The next in order is the report of the Committee on Resolutions, which will be presented by Carroll G. Pearse, President-elect of the National Education Association, Chairman of the Committee on Resolutions.

CHAIRMAN PEARSE: Madam President, in behalf of the Committee on Resolutions I beg leave to offer the following report:

DECLARATION

The members of the National Education Association, assembled in its Forty-ninth Convention, present the following declaration:

1. The members of this Association renew the affirmation of their belief in the fundamental importance of a system of free public education, thru which all the children of the state may be trained for good citizenship and for usefulness.

They view with special satisfaction the policy of the national government to extend to the newly acquired possessions of the Nation the same system of universal public education which is practiced elsewhere thruout the home territory of the United States.

2. The increased cost of living, and the steadily increasing number and scope of public educational activities, have rendered it necessary that larger expenditures be made for schools than in the past; it therefore becomes imperative that all ommunities in the Nation recognize, as many have already done, that more money must be contributed and expended for schools, both locally and by the state, if our young people are to have that kind and quality of education demanded by the times.

3. The Federal Bureau of Education is the only educational agency belonging to all the people, supported by all the people, and from which all the people have the right to demand service. This Association, therefore, requests the Congress of the United States to grant the Bureau such increased support as will enable it to serve all the people, by conducting educational research and disseminating educational information thruout the country. We urge that the national appropriations for studying problems involving the welfare of the Nation's school children be made comparable in amount with those annually made for studying problems involving the welfare and conservation of the material resources of the Nation.

We ask that Congress increase the salary of the Commissioner of Education of the United States so that it may equal the salaries paid by the states, municipalities, and private institutions to men and women occupying educational positions of the first magnitude.

4. The increasing complexity of life-problems in modern society makes it imperative that our young men and women shall be well-grounded in the principles of right living, so that the dignity and prosperity of the Nation, as well as the integrity and success of the individual, may be properly safeguarded. It is therefore right that suitable ethical instruction should be introduced into the programs of even the elementary schools, to supplement the moral training given in the home.

In devising courses and methods for such instruction, it will be necessary to adjust the material and aims to the changing needs of the growing child in his passage thru successive developmental stages, with their varying instincts and tendencies, on ascending levels. What can be merely habituation and imitation, in the primary grades, must become rational, ethical conception in the adolescent age. The noble example of great lives will inspire our youth with the enthusiasm for self-improvement. To develop in our children strong moral character, without the taint of self-consciousness or pharisaical self-satisfaction, must ever remain a prime duty of the educator.

5. It is coming more and more to be recognized that the proper spiritual welfare and development of our children depends in a large measure upon their healthful physical growth. This Association, therefore, favors all measures which will tend to secure the health of the growing child. Among these must be reckoned proper attention to school hygiene in all of its applications; proper medical inspection, and the co-operation of boards of health in matters of sanitation and contagious disease; the extension of the use of school grounds, and, in large cities, of school roofs, as playgrounds, open-air gymnasia, and school gardens; the establishment of open-air schools, and of forest and

farm schools; and the furtherance of physical exercises in formal arrangement and in sports and games, commensurate with the powers and needs of the growing body in its successive stages.

6. An important step in providing the best school advantages will be such study of the hygienic and other requirements of school buildings and grounds as shall make public-school authorities everywhere familiar with the necessities of schoolhouses as to size of rooms, window space, corridors, stairways, and exit necessities, ventilation, heating, playgrounds, and indoor and outdoor equipment, thus rendering possible the standardizing of school houses, rooms, and appliances; also rendering possible a general understanding of the proper cost of schoolhouses and appurtenances, thus giving to school authorities such knowledge as shall enable them, on the one hand, to avoid meanness and inadequacy, and, on the other hand, to provide beautiful, wholesome, and convenient school facilities without wasteful expenditure.

7. The school buildings of our land and the ground surrounding them should be open to the pupils and to their parents and families as recreation centers outside of the regular school hours. They should become the radiating centers of social and cultural activity in the neighborhood, in a spirit of civic unity and co-operation, omitting, however, all activities and exercises tending to promote division or discord. They should give opportunity for continuation schools, vacation schools, and for industrial, horticultural, and agricultural training, as well as for the education of adults thru lectures and thru school and college extension classes.

To safeguard, however, the integrity, privacy, and hygienic security of our schools (which are, in reality, the homes of our children during a large part of their waking hours), so that the more subtle elements residing in the educational atmosphere of a well-regulated school may be preserved, and the children guarded against the unsanitary conditions eventually following in the wake of promiscuous gatherings, this wider use of the school plant should be controlled exclusively by the school authorities; the buildings during such use, and the persons thus using them should be subject to medical inspection whenever, and in whatever manner required.

8. Realizing the fact that a large percentage of children, whose physical and mental peculiarities require special methods of education, are still to a great extent outside the scope of the compulsory-education laws, and that the presence of the exceptional child in our modern civilization constitutes a problem of the greatest import, it is the sense of this Association that the compulsory-education laws of states and communities should be so amended, developed, and extended that they shall apply to all children of school age, without exception, and provide for their training; further, that the laws should recognize the difference between the chronological age of a child and his maturity, and that the school-age limit of each individual child should be determined by requiring the child to meet physical and mental tests, even tho the child be in years above the age standard; in other words, a child's actual age should be determined by physio-psychological data corresponding to the normal standard for the age limit required by law. All children or persons failing to meet such maturity test at the extreme school-age limit, should remain under public supervision and control, either until they reach maturity, or permanently.

The same principle should be the guide in determining whether a child is fit to be employed in any occupation. Not when a child is fourteen or sixteen years of age, but when he possesses the maturity of body and mind proper to a normal child of that age, should he be released from the guardianship of the state or the community. Child-labor laws should be so modified as to meet this requirement.

9. The increasing complexity of our social and economic conditions makes it constantly more difficult for young people to decide upon the vocations which are best for them to follow, and to search out the opportunities to prepare themselves for and to enter upon such vocations. Our public educational system should, therefore, make provision for instructing our youth concerning the various occupations, and the advantages which the several employments offer; and, in addition, boys and girls and their parents should, when they desire it, be able to receive such intelligent counsel as will enable the young people entering upon life's work to judge for what vocation the abilities and tastes of each best fit him, as well as to find the place and the opportunity to begin the work thus chosen.

10. Children are recognized as the most precious natural resource of the Nation. The conservation and development of this great social resource is engaging the earnest attention of all classes of thinking people. The recent Child-Welfare Exhibits in New York and Chicago drew thousands of visitors from all walks of life, both people who came to receive help, and people who came to offer the assistance which religion, science, and money can contribute.

The National Education Association earnestly requests that the Panama-Pacific Exposition provide for a complete Child-Welfare Exhibit, to the end that the benefits

heretofore enjoyed by a few favored localities may be extended to every place sufficiently fortunate to have representatives in attendance at the Exposition thru which California is planning to instruct the world.

11. The success of women in all fields of education during the past generation has demonstrated their intellectual equality and power. The opportunities for higher technical training, however, have not been generally offered to girls and women. It is the sense of this Association that modern, progressive principles should be applied to the education of girls in the schools and women in the colleges, with complete and varied equipment and with as adequate opportunities to prepare themselves for the occupations in which they have a special interest, as are already provided for boys and men.

12. The very material advance made in the cause of world peace during the past year encourages the National Education Association to urge a more widespread dissemination of knowledge upon this vital subject. We commend the American School Peace League as a channel thru which teachers may procure such knowledge, together with suggestions for its presentation. The League has done excellent work in collecting and organizing material which appeals both to children and to adults; the accuracy of its statements are not questioned; its arguments are sound. The proposal to establish a world tribunal to fill the place of an international court for civilized nations is worthy of commendation, and should have the earnest support of all teachers.

13. A very general impression prevails to the effect that the teacher's remuneration is a generous reward for services rendered. The increased demands upon teachers, due to the lifting of the work of teaching to a higher professional level, adds heavily to the tax upon the teacher's time and strength; the increased cost of living affects teachers quite as seriously as other citizens. For these reasons, this body considers highly important the initiation of an inquiry into the present conditions affecting the teaching body of the Nation, to the end that these conditions may be understood and any desirable action taken.

14. The National Education Association expresses its heartiest recognition of greetings borne to its members by Miss Kate Stevens, Head Mistress of the Montem Street Central Council School, London; from the Teachers' Guild of Great Britain and Ireland; from the National Union of Teachers; from the London Teachers' Association; from the London Head Teachers' Association; and from the Child-Study Society of England.

The members of the Association return in kind these cordial professional greetings, and join with their fellow-teachers of Great Britain and Ireland in the wishes expressed for the promotion of international good-will and the early establishment of agencies for the settlement of international difficulties by arbitration. Further, we do hereby accredit Mrs. Fannie Fern Andrews, of Boston, Mass., secretary of the American School Peace League, as the delegate representative of the National Education Association to bear our return greetings to the organizations whose greetings Miss Stevens has brought to us.

15. The members of this Association hereby express their hearty appreciation of the great progress made by the National Bureau of Education under the able leadership of Commissioner Elmer Ellsworth Brown, and pledge their enthusiastic support to his successor, Commissioner Philander P. Claxton, in his work of increasing and extending the service of the bureau.

Committee on Resolutions
- Carroll G. Pearse, of Wisconsin, *Chairman*
- Mrs. O. Shepard Barnum, of California
- James W. Crabtree, of Nebraska
- Maximilian P. E. Groszmann, of New Jersey
- Miss Gertrude E. English, of Illinois
- John H. Phillips, of Alabama

On motion, the Declaration of Principles as presented was adopted by the active members present, without dissent.

On motion by Chairman Pearse of the Committee on Resolutions, the following resolution was adopted by unanimous vote:

Be it resolved, That the thanks of the Association are hereby tendered to its honored President, Mrs. Ella Flagg Young, for the interesting and valuable program presented at this meeting, and for her efficient administrative conduct of the affairs of the Association during the past year;

Be it further resolved, That the Association hereby expresses its appreciation of the eminently satisfactory arrangements made by the citizens of San Francisco and California for the reception and entertainment of its membership; that its thanks are especially tendered to his Excellency, the Governor of California, his Honor, the Mayor of San Francisco, the educational authorities, state and municipal, the chairmen and members

of the several local committees, the members of the press, and to the hotel and railroad officials and the citizens, whose uniform courtesies have placed the Association under a lasting debt of gratitude, and made this, its Forty-ninth Annual Convention, memorable in the annals of the National Education Association.

MR. PEARSE also offered the following resolution, which on motion was adopted:

Resolved, That the President of the National Education Association be authorized to appoint a committee consisting of seven active members, to consider and report to the Association its findings and recommendations concerning the salaries, tenure, and pensions of teachers; the committee to take into consideration among other things the increased cost of living, the increased professional demands upon the time, strength, and funds of teachers, and whether the increase in teachers' wages has kept pace with the increase in the wages of other workers, the increase in the cost of living, and the increased demands upon teachers; and

Resolved, That the Board of Directors of this Association be, and hereby is, instructed to set aside an appropriation from the current funds of the Association the sum of Three Thousand Dollars ($3,000), the same to be used, or so much thereof as may be necessary, for the purposes of the investigation and report as directed herein.

PRESIDENT YOUNG: Next in the order of business is the report of the Committee on the Revision of the By-Laws, as submitted at the business meeting in Boston.

SECRETARY SHEPARD: The members will find in their seats copies of the proposed amendments to the By-Laws as presented by the Committee on Revision. You will see that the copies distributed contain the proposed amendments in parallel columns with the By-Laws as they now read. These copies are identical with copies of the proposed revisions which were distributed to all active members with the Program-Bulletins in advance of the convention, and are doubtless familiar to all.

JAMES W. CRABTREE, of Nebraska: Madam President, the proposed amendments are in the hands of the active members present and do not need any explanation. The members have doubtless considered these By-Laws which were distributed to all active members some weeks ago. I therefore move that the report of the Committee on Revision of By-Laws be adopted as presented.

This motion was duly seconded.

MISS CARRIE C. CALKINS, of New York: I move that the report and the motion to adopt it be laid on the table for one year.

This motion was duly seconded, presented, and carried.

MR. CRABTREE: Another resolution was presented to the committee for consideration, too late to get all the members of the committee together, and being a member of that committee I take pleasure in presenting the resolution now. It is a matter that may not interest all the states in the Union, but it is of importance to two of our territories. We have a petition here signed by thousands of children and teachers asking us to take some interest in the admission of this territory to statehood:

Resolved, That it is the sense of the National Education Association that the admission of Arizona and New Mexico to statehood would greatly enhance educational conditions in those territories.

C. A. DUNIWAY, of Montana: As a member of the Association, I desire to state that this is a political matter, and that we should take no action on it.

MR. PEARSE: This may be a little out of the usual custom of this Association, but the educational conditions in these territories are deplorable in some respects on account of lack of action, and it seems to me that we might be a little generous.

MR. DUNIWAY: I will sign the petition personally and try to get the bills passed, but as a member of this Association I think it is none of our business. I believe we should keep out of all political questions.

MR. GREENWOOD: I live close to Oklahoma and I went into that territory when they had hundreds of thousands of children in that territory, and they wanted to be admitted to statehood on an equal footing with the other states that were already in the Union. I know the conditions in New Mexico, and what they have been doing for

the past twenty-five or thirty years. I am somewhat familiar with the conditions in Arizona, and I do not believe it is political when we work for the interest of education. We are in favor of educating the children in all parts of the country that they may become good and useful citizens. I don't care whether they make political capital of it or not. The men at Washington are our servants, and we can petition them in the interests of these territories that are striving to come into statehood. I am in favor of the resolution and hope it will be passed.

On motion the resolution was adopted.

MRS. A. B. MORIARTY, of New York: I desire to present a notice of an amendment to Article I of the By-Laws, to be known as Section 2, and to be acted upon by the Annual Convention one year hence:

ARTICLE I

Sec. 2. Educational institutions shall include schools, school boards, library boards, educational publishers, and such clubs as are distinctly educational or have educational departments properly organized, with a definite membership and a vote.

On motion, this notice was accepted to be acted upon at the next annual meeting.

The following resolution was presented by Helen C. Putnam, of Providence, R.I.:

Resolved, That a special committee of seven representatives, one from each of the seven states having largest population, shall be appointed by the President before the end of this convention, to report in writing next year on the wisdom and practicability of publishing the material now issued in a single volume of *Proceedings*, together with other desirable educational matter, in a monthly, bi-weekly, or weekly periodical; for the purpose of increasing the usefulness of the material among members, of increasing membership, general public intelligence in educational matters, and the influence of the National Education Association; said Committee to consult with the Publication Committee provided for by Article VIII of the By-Laws (on *Proceedings*), with the Committee on Revision of By-Laws, and to learn so far as possible the wishes of teachers thruout the country.

This motion was duly seconded and the vote taken, but before the President had announced the result of the vote a motion was offered by H. J. Baldwin of California that the Executive Committee of the Association be substituted for the committee proposed in the resolution. This motion was entertained by the Chair and was duly seconded and carried.

PRESIDENT YOUNG: The next item in the order of business is a communication from the Department of Superintendence.

J. A. SHAWAN, of Ohio:

To the President and Active Members of the National Education Association:

At the meeting of the Department of Superintendence recently held at Mobile, Ala., a resolution was passed approving the Phonetic Key Alphabet and authorizing the President of that Department to appoint a committee of five to bring the matter before this Association and to urge the adoption of a resolution approving the same.

In accordance with that action the President of the Department has appointed the following committee:

J. A. Shawan, superintendent of schools, Columbus, Ohio, *Chairman.*
Vernon L. Davey, superintendent of schools, East Orange, N. J.
J. F. Millspaugh, president, State Normal School, Los Angeles, Cal.
L. H. Jones, president, State Normal School, Ypsilanti, Mich.
Miss Katherine D. Blake, principal of Public School No. 6, New York, N.Y.

On behalf of this committee and in the name of the Department of Superintendence, the following resolution is submitted:

Resolved, That we concur in the opinion long held by prominent philologists and other scholars that a simple and uniform system of indicating pronunciation in our dictionaries, encyclopedias, gazetteers, and textbooks is demanded by the labor-saving and time-saving exigencies of our day. We believe such simplicity and uniformity embodied in a one-sign, one-sound alphabet would be an economic and educational advantage of great value, not only to the pupils and teachers in our schools, but to the reading and scholarly public in general. Therefore, we hereby give our indorsement as requested by the Department of Superintendence to the key alphabet adopted by the department at its late meet-

ing at Mobile, and we urge the adoption of this alphabet by our publishers as the uniform and standard key of pronunciation in all our books.

Respectfully submitted,

J. A. SHAWAN, *Chairman*

There are so many things being brought into our schools, so many demands being made upon the teacher's time, that it is absolutely necessary that we eliminate anything we can and simplify as much as possible. There is no reason for fourteen vowels having eighty-eight sounds; there is no reason for forty-four sounds represented by sixty-five characters. So that it is in the direction of simplicity, and seems to us that the adoption of this resolution would mean a great deal to the children. I move the adoption of the resolution.

J. CARLETON BELL, of New York: I wish to offer an amendment to the resolution which has just been presented, as follows:

Resolved, That the proposed phonetic key be referred for investigation to a committee of three, appointed by the Chair, and that this committee be instructed to invite the Departments of Education of the leading universities, such as Columbia, Chicago, California, and Leland Stanford, as well as superintendents generally, to test the proposed key experimentally, under school conditions, along the lines indicated by Professor Whipple's pioneer research, and to report the results of such investigations to this Association.

M. P. E. GROSZMANN, of New Jersey: I am in favor of the amendment. This is the time for experiment, I was in favor of the resolution, but am in favor of further investigation. I wish to indorse the amendment.

FRANCIS G. BLAIR, of Illinois: I move that the amendment and resolution be laid on the table for one year.

WILLIAM M. ROBERTS, of Illinois: Does this mean that we shall have no chance to discuss this question; that members who have come here from all parts of the country to discuss this matter will have to wait for another year? We have been waiting nine years now.

Calls for question. The motion to lay the matter on the table was presented and carried.

As there was no further business, the Chair declared the meeting adjourned.

IRWIN SHEPARD, *Secretary*

Approved,

ELLA FLAGG YOUNG, *President*

MINUTES OF MEETING OF BOARD OF DIRECTORS OF THE NATIONAL EDUCATION ASSOCIATION FOR THE YEAR 1910–11

SAN FRANCISCO, CAL., MONDAY, JULY 10, 1911

The annual meeting of the Board of Directors was called to order by President Ella Flagg Young at the St. Francis Hotel at 11 A.M., July 10, 1911. The following members responded to roll-call:

Ella Flagg Young, Illinois; James Y. Joyner, North Carolina; Durand W. Springer, Michigan; Irwin Shepard, Minnesota; J. J. Keyes, representing the Board of Education of Nashville, Tennessee; James M. Greenwood, Missouri; Eliphalet O. Lyte, Pennsylvania; A. J. Matthews, Arizona; Duncan MacKinnon, California; Clem Hampton, Florida; J. Stanley Brown, Illinois; Thomas A. Mott, Indiana; O. P. Bostwick, Iowa; John MacDonald, Kansas; E. E. Scribner, Michigan; S. L. Heeter, Minnesota; E. E. Bass, Mississippi; James M. Hamilton, Montana; Mrs. L. C. Booth, Nevada; Edwin D. Ressler, Oregon; Reed B. Teitrick, Pennsylvania; George F. Weston, Rhode Island; J. J. Keyes, Tennessee; George H. Carpenter, Texas; Henry B. Dewey, Washington; Carroll G. Pearse, Wisconsin.

Directors answering to roll-call, twenty-six.

The Secretary reported that a number of the directors who were unable to attend the meeting had tendered their resignations, asking that other active members from their respective states be appointed to fill the vacancies.

On motion, duly seconded, the following appointments to fill vacancies were made:

John H. Phillips, of Alabama, to succeed Director John W. Abercrombie, resigned.
Ernest Berry, of Arkansas, to succeed Director George B. Cook, resigned.
W. W. Remington, of Colorado, to succeed Director Charles E. Chadsey, resigned.
Harlan Updegraff, of the District of Columbia, to succeed Director P. M. Hughes, resigned.
Walter R. Siders, of Idaho, to succeed Director Charles S. Meek, resigned.
M. A. Cassidy, of Kentucky, to succeed Director W. H. Bartholomew, resigned.
M. Bates Stephens, of Maryland, to succeed Director A. C. Willison, resigned.
A. E. Winship, of Massachusetts, to succeed Director Irving O. Palmer, resigned.
John R. Kirk, of Missouri, to succeed Director Howard A. Gass, absent.
James W. Crabtree, of Nebraska, to succeed Director A. A. Reed, resigned.
Robert F. Asplund, of New Mexico, to succeed Director James E. Clark, resigned.
Edwin S. Monroe, of Oklahoma, to succeed Director W. C. Canterbury, resigned.
C. G. Lawrence, of South Dakota, to succeed Director Freeman H. Hoff, resigned.
D. H. Christensen, of Utah, to succeed Director G. N. Child, resigned.
Wilson M. Foulk, of West Virginia, to succeed Director Morris P. Shawkey, resigned.
Charles O. Merica, of Wyoming, to succeed Director A. D. Cook, resigned.

All of the newly elected directors above named were present and responded to call of the roll.

The total number of directors present was forty-two.

THE PRESIDENT: The next order of business is the reading of the minutes. They were published in the Boston volume of *Proceedings* and in the last *Yearbook*. Will you have them read?

DIRECTOR E. E. SCRIBNER, of Michigan: I move that we dispense with the reading of the minutes, and that they be approved as printed in the last volume and *Yearbook*.

The motion was duly seconded and carried.

THE PRESIDENT: The next in order is the report of the Board of Trustees.

DIRECTOR JAMES M. GREENWOOD, Vice-Chairman of the Board of Trustees: Madam Chairman, in the absence of the Chairman of the Board of Trustees, Dr. Nicholas Murray Butler, it devolves upon me to present the Annual Report of the Board of Trustees.

The report has been published and distributed to the members present. It is a clear and explicit statement and explains itself. Has any member present any question to ask concerning it?

PRESIDENT YOUNG: If the Board will permit a word of explanation from the Chair: I believe the signature of the President is not attached to that report; is it, Mr. Greenwood?

DIRECTOR GREENWOOD: It is not attached to the report.

PRESIDENT YOUNG: The signature of the President as *ex-officio* member of the Board of Trustees was withheld, not because of any objection to the facts of the report, but to the character of the securities in which the $9,900 added to the permanent fund has been invested. The President holds very positive views that a trust fund should be invested in school, municipal, county, state, or national bonds; but the recent addition to the permanent fund was invested in industrial bonds. The objection is no reflection at all upon the railroad or companies in which the investments were made; but it happens to be the view of the President that the risks are too great in the case of industrial bonds—we all know the history of the Johns Hopkins University—while there are no such risks in governmental bonds. That is why the signature is withheld. I wish to repeat that I have no knowledge that the bonds that were bought are not perfectly good, but they belong to the list of industrial bonds.

DIRECTOR SCRIBNER: May I ask Madam President to name the specific bonds to which she refers?

PRESIDENT YOUNG: I refer to the bonds in which the addition to the permanent fund, $9,900, was invested.

DIRECTOR SCRIBNER: What investment?

PRESIDENT YOUNG: One, I think, was in bonds of the Manhattan Railway Company. Mr. Greenwood, I think, knows.

DIRECTOR SCRIBNER: Are they considered as industrial?

PRESIDENT YOUNG: I consider railroading an industry.

DIRECTOR J. STANLEY BROWN, of Illinois: I move that this report be received and printed as read by the Vice-Chairman of the Board of Trustees.

DIRECTOR SPRINGER, of Michigan: I wish to amend the motion to the effect that, if the President desires to add such a statement as she made to the report as printed in the *Proceedings*, it would be perfectly proper for her to do so.

DIRECTOR BROWN: I accept the amendment.

The motion as amended was then duly seconded.

PRESIDENT YOUNG: It has been moved and seconded that the report of the Board of Trustees be printed in the *Proceedings*, and that to it be added the statement of the Chair as to why the President's name does not appear among those signing the report. I appreciate the motion, because I have no reflection to make on the facts stated in the report as to the bonds in which the Trustees have invested the permanent fund.

The motion was then formally carried.

PRESIDENT YOUNG: Next in order is the report of the Treasurer.

DIRECTOR SPRINGER, Treasurer of the National Education Association: You all have printed copies of the Treasurer's Report, which have been distributed. If there are any questions which the directors desire to ask, I shall be pleased to answer them.

PRESIDENT YOUNG: In the report under the expenses of the Department of Superintendence, on the third page, we find the item "Expenses of the President." These are expenses of the President of the Department of Superintendence, and not of the National Education Association, are they not, Mr. Treasurer?

TREASURER SPRINGER: Yes.

PRESIDENT YOUNG: I simply wanted to make sure.

DIRECTOR KIRK, of Missouri: I move that the report of the Treasurer be received, approved, and printed in the *Proceedings*.

The motion was duly seconded, formally presented, and carried.

PRESIDENT YOUNG: The next in order is a report by the Secretary on directions by the Board at the last meeting.

The Secretary read as follows:

To Members of the Board of Directors:

At the meeting of this Board of Directors held in Boston, July 7, 1910, a motion prevailed that $500, or as much thereof as might be necessary, be appropriated for the expenses of the Committee on Uniform Educational Statistics, such appropriation being subject to the approval of the Committee on Investigations and Appropriations of the National Council, which was received. The Treasurer's report will show that $468.13 was paid during the year for the expenses of this committee, not including the printing of a tentative report of this committee made at Mobile and included in the Report of the Department of Superintendence at Mobile, recently issued.

At the same meeting a motion prevailed directing the Secretary to print and distribute to the active members a report of progress by the Committee on a Uniform System of Key Notation. This report was so printed and distributed to all active members. The committee made a final report at the Mobile meeting of the Department of Superintendence, and the same was included in printed *Proceedings* of that meeting recently published. The committee was then formally discharged by the Department of Superintendence which created it.

Respectfully submitted,

IRWIN SHEPARD, *Secretary*

PRESIDENT YOUNG: The next in order is communications to the Board. I have a communication from Commissioner Elmer Ellsworth Brown, of the Bureau of Education, which the Secretary will read.

THE SECRETARY: (Reads:)

DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

WASHINGTON, June 28, 1911

Mrs. Ella Flagg Young, President of the National Education Association, Chicago, Illinois.

MY DEAR MRS. YOUNG: At the meeting of the National Education Association held at Boston in July, 1910, the following resolution was adopted:

"In the judgment of the National Education Association, the time has arrived for the formation of an International Council of Education, to be composed of leading educators from all the principal nations of the globe; the first meeting of the council to be held in Washington, D.C., at some time during the year 1911. The Association hereby appoints the United States Commissioner of Education, the President and all living ex-Presidents of the National Education Association, and seven others, to be chosen by the above designated persons, as a committee to formulate plans for such an International Council and to attend to their execution."

In accordance with this resolution, correspondence has been had with the President and former Presidents of the National Education Association, and the American committee for the proposed International Council of Education has been constituted as follows:

MEMBERS EX OFFICIO

The Commissioner of Education of the United States
Mrs. Ella Flagg Young, President of the National Education Association

Mr. Josiah L. Pickard,	President 1871
Mr. Thomas W. Bicknell,	President 1884
Mr. Aaron Gove,	President 1888
Mr. Nicholas Murray Butler,	President 1895
Mr. Charles R. Skinner,	President 1897
Mr. James M. Greenwood,	President 1898
Mr. E. Oram Lyte,	President 1899
Mr. Oscar T. Corson,	President 1900
Mr. James M. Green,	President 1901
Mr. Charles M. Eliot,	President 1903
Mr. John W. Cook,	President 1904
Mr. William H. Maxwell,	President 1905

Mr. Nathan C. Schaeffer, President 1907
Mr. Edwin G. Cooley, President 1908
Mr. Lorenzo D. Harvey, President 1909
Mr. James Y. Joyner, President 1910

ELECTED MEMBERS

Mr. Martin G. Brumbaugh, superintendent of schools, Philadelphia, Pa.
Mr. P. P. Claxton, University of Tennessee, Knoxville, Tenn.
Mr. Andrew S. Draper, state commissioner of education, Albany, N.Y.
Mr. G. Stanley Hall, president, Clark University, Worcester, Mass.
Mr. Abbott Lawrence Lowell, president, Harvard University, Cambridge, Mass.
Mr. Henry S. Pritchett, president, Carnegie Foundation for Advancement of Teaching, New York City
Mr. Benjamin Ide Wheeler, president, University of California, Berkeley, Cal.

It has been found impossible to arrange for the organization of an International Council of Education in time to meet within the year 1911. The committee as constituted above is now in a position to enter upon the necessary correspondence looking to such organization.

The committee regards the proposed Council as one to which matters of great weight and importance may from time to time be submitted. It should be able to exercise a mighty influence in the determining of world standards in education of different types and grades. It should become the most competent advisory body in all matters relating to international congresses and exhibitions of an educational or scientific character. And international exchanges of teachers and students as well as the international diffusion of educational information should be greatly furthered through its activities.

Respectfully submitted for the committee,

ELMER ELLSWORTH BROWN,
Commissioner of Education

PRESIDENT YOUNG: Is there any action necessary by this Board to confirm the appointments?

DIRECTOR SCRIBNER: I move that the report be accepted, placed on file, and receive the commendation of this body.

DIRECTOR PHILLIPS: I second the motion.

PRESIDENT YOUNG: All those in favor signify by saying, Aye. Opposed, No. The motion is carried. Are there any other communications?

THE SECRETARY: I have a communication from Dr. Nicholas Murray Butler, Chairman of the Board of Trustees, dated July 1, 1911.

(Reads:)

COLUMBIA UNIVERSITY,
NEW YORK, July 1, 1911

To the Board of Directors of the National Education Association:

The generous and most complimentary action of the Directors in re-electing me, on July 7, 1910, as a member of the Board of Trustees by unanimous vote, despite the strong expression of my wish and desire to retire from the Board which was conveyed to the Directors at my request by the Director from New York, was formally communicated to me by the Secretary on my return from a long absence in Europe on October 25, 1910. My first purpose was to decline the re-election so kindly tendered, as I had neither time nor inclination to continue to serve as a member of the Board of Trustees. At once, however, I was so overwhelmed with telegrams and letters from individual Directors, from almost every living former President of the Association, and from scores of representative active members, that my determination was shaken, and, against my better judgment, I yielded to the solicitation of these friends and accepted the post that the Directors had so kindly tendered me. For this action of the Directors I beg to return my grateful and appreciative thanks. It is the concluding act in a long series of friendly actions that I cherish most highly. I accepted this re-election, however, only because I was convinced that any other course would have embarrassed the business of the Association and jeopardized its interests. I accepted it, furthermore, with the unalterable determination to retire as a Trustee at the next meeting of the Directors.

Because of my absence in Europe, I was necessarily prevented from attending the annual meeting of the Trustees held at Boston on July 2, 1910. Because of serious illness in my immediate family, I shall be prevented from attending the annual meeting

of the Trustees called for July 8, 1911, at San Francisco, California. I beg to call the attention of the Directors to the fact that my office as Trustee becomes automatically vacant on the adjournment of the annual meeting to be held July 8, 1911, in accordance with the following provision of the Act of Incorporation, Section 6:

"The absence of a Trustee from two successive annual meetings of the Board shall forfeit his membership."

In my judgment, this provision of the Act of Incorporation is self-operating and means precisely what it says. The fact that I was re-elected a Trustee on July 7, 1910 —that is, after the annual meeting of 1910 had been held and before the annual meeting of 1911—has, I believe, no bearing whatever upon the provision of the Act of Incorporation. The Board of Trustees of the National Education Association is, like the Senate of the United States, a continuing body, and I cannot believe that the date of a re-election as Trustee can have any effect in halting the operation of so definite and precise a statement as that which has been quoted. In order, however, that the matter may be placed beyond doubt, I beg herewith to tender my resignation as a Trustee of the National Education Association, the same to take effect immediately, and I ask that this resignation be accepted. During my service as Trustee, I have had the satisfaction of seeing the Permanent Fund grow from $45,000 to $180,000 and safely invested in sound securities. If this fund shall be preserved for the purpose for which it has been accumulated, it will serve as a protection to the Association in years of deficient revenue. To protect this fund and to preserve it from dissipation has been the policy of the Trustees for a quarter of a century, and I sincerely hope that it will never be departed from.

With renewed thanks to the Board of Directors for their many acts of confidence and kindness during a long series of years, I am

Faithfully yours,

NICHOLAS MURRAY BUTLER

DIRECTOR PEARSE, of Wisconsin: Madam President, I do not think anyone has any disposition to be critical or technical in this matter; I think Dr. Butler is entitled to courtesy at the hands of this body. I therefore move that his resignation be accepted.

The motion was duly seconded.

DIRECTOR GREENWOOD, of Missouri: I would like to make a few remarks. The men who inaugurated the plan for the establishment of a permanent fund were Albert G. Lane, of Chicago, and Dr. N. A. Calkins, of New York. I happened to be connected with the Association at that time, and when it passed out from under debt in 1884 we had in mind, three of us in a consultation in Chicago, that, if we could establish a permanent fund of $100,000 which could remain intact, that fund would furnish a basis for continuing the National Education Association and its work. The fund was established by setting aside the surplus of the funds from the meetings of 1884 and 1885, $3,400, and has been continued until now, as you see by the report of the Board of Trustees, it amounts to exactly $180,000. Dr. Calkins was elected in 1886 as Chairman of the Board of Trustees, and served until his death in December, 1895. He was succeeded temporarily in office by Dr. H. S. Tarbell. At the next annual meeting of the Board of Trustees Albert G. Lane was elected Chairman and served continuously until his death in August, 1906. Dr. Nicholas Murray Butler was elected by the Trustees as Chairman to succeed Mr. Lane, and has served continuously until the present time. I have been a part of the time intimately connected with those who have been looking after this Permanent Fund. You will find that in 1905 and since, the following persons, regularly appointed in accordance with the By-Laws, have examined the funds and the securities of the Permanent Fund (physically examined them) which have been in the custody of the officially appointed custodian, Mr. Louis Boisot, Trust Officer of the Trust and Savings Department of the First National Bank of Chicago: to wit, Mr. Carroll G. Pearse, of Milwaukee, Wis.—as you will find printed in the annual volume of *Proceedings*—examined the securities of the Association in 1905 and reported as to their existence and integrity; Mr. Homer H. Seerley, of Cedar Falls, Iowa., made the examination in 1906; Mr. Orville T. Bright,

of Chicago, Ill., in 1907; Mr. E. G. Cooley, of Chicago, Ill., in 1908; Mr. John W. Cook, of DeKalb, Ill., in 1909; and Professor Charles H. Judd, Professor in the University of Chicago, in 1910. According to the report submitted herewith by the Board of Trustees, I notice that the annual examination was made June 15 for the year just closed by Mr. John McLaren, who certifies as follows:

I have this day examined the securities in the foregoing statement made by the Board of Trustees, and find all bonds and securities therein named in the custody of Louis Boisot, Trust Officer of the First Trust and Savings Bank of Chicago.

(Signed) JOHN MCLAREN
President, International Audit Company of Chicago

His name also appears under a similar certificate as having examined the Treasurer's report for the current year. I make this statement that you may know that the funds of the National Education Association have been examined annually, and are kept intact and safe, just exactly where the annual reports of the Board of Trustees state they are. Moreover, the Trustees' Reports have annually not only given detailed statements as to the securities held, but also show each year the amount of interest collected from these securities, and turned over to the current funds of the Association, as shown by the Treasurers' Reports.

I want to make a personal reference for a moment. Dr. Butler had intended and planned to be with us at this meeting, but his mother is old and is very ill. The duties resting upon him are many, but he deems it his first duty, at this time, to be at the bedside of his mother, as a letter to me indicates.

I have worked with him; I know the man, and I know the great work that he has done, and I feel that the three Chairmen of the Board of Trustees, N. A. Calkins, Albert G. Lane, and Nicholas Murray Butler, have, by their untiring industry and disinterested work, done the noblest and most unselfish work that has been done by any members of our Association, excepting perhaps those who helped to form the organization more than fifty years ago.

I deeply regret that Dr. Butler feels that he must retire from this office in which he has served the Association so long and so faithfully, because we need his counsel and his advice.

PRESIDENT YOUNG: Are there any further remarks? You have heard the motion that the resignation be accepted. All those in favor signify by saying, Aye. Opposed, No. It is so ordered.

Will you permit a word from the Chair with regard to the examination of the securities? The securities of the Permanent Fund are kept in the custody of the Trust Officer of the Trust and Savings Department of the First National Bank of Chicago, a very sound institution. The Chair has never consulted a lawyer as to this matter, but it is the opinion of the Chair that if a certain number of bonds and securities are deposited with a company which guarantees the safety of those bonds and securities, that it is absurd to go to the bank vaults to count those bonds each year, and that is why the Chair did not go. There might be a point raised if some day some part of those securities should be missing. Then it would lie between the guarantor and the association that deposited the bonds. Now, the Chair has not consulted a lawyer, but her own judgment dictates the opinion that if securities have been placed with a bank guaranteeing the safety of the securities then the firm would be held responsible until those securities are taken away, and it is almost childlike (yet it is called for in the Constitution and By-Laws) to examine those securities from year to year, to see that the guarantor has not taken anything out. I trust that explains a very simple situation.

DIRECTOR JOHN R. KIRK, of Missouri: Are nominations in order to fill the vacancy occasioned in the Board of Trustees by the resignation of Trustee Butler?

PRESIDENT YOUNG: They are.

DIRECTOR KIRK: Then, Madam President, I wish to place in nomination a man

who has long been very active and very happily situated with regard to attending the meetings and participating in the business of the National Education Association. I beg leave to nominate Mr. J. Stanley Brown, of Joliet, Ill., to succeed Dr. Nicholas Murray Butler as a member of the Board of Trustees.

DIRECTOR SCRIBNER: I second the nomination.

DIRECTOR DEWEY, of Washington: I take pleasure in nominating a former president of this Association, James Y. Joyner, of North Carolina.

This nomination was seconded.

DIRECTOR MACKINNON, of California: I move that the nominations be closed.

DIRECTOR SCRIBNER: In view of the fact that we are not in executive session, I move that in taking this ballot, when the ballots are deposited, each Director rise and give his name, and that the same be checked by the Secretary.

PRESIDENT YOUNG: Unless there is objection it will be so ordered.

I appoint Director Scribner and Director Dewey as tellers.

While the ballots are being counted, I might announce that the Executive Committee decided yesterday that as the very recent change announced in the official program by the Secretary in the method of admission to business meetings might result in great confusion, the former method of admitting by active-membership badge would be the method for this year. The Chair appointed two members of the Executive Committee to pass upon all doubtful cases and to oblige them to present their certificates, if necessary; so you will please make known to the active members from your respective states that they are to be admitted to the business meetings as usual, on active-membership badge. The change from admission by badge to admission by certificate was not announced in the preliminary program and the final program was issued only two or three days ago.

DIRECTOR MACKINNON: Is not this liable to lead to confusion and possibly to abuse from the fact that we announce officially in the official program that admission is to be by certificate, and the active members coming to these business meetings may not have their badges with them and may insist on being admitted by certificates? If, now, it is decided that we are going to admit by badge there is a possibility that we may have two people in the meetings for one membership, one admitted on the badge and one on the certificate.

PRESIDENT YOUNG: That question came up yesterday, but it seemed such a reflection on the teachers of the United States that the committee did not consider it.

DIRECTOR MACKINNON: I think, just as a safeguard against any charges of duplicate admission—we have had them in the past—the Board of Directors should adopt such rules as will prevent the admission to the business meetings of those who are not active members.

PRESIDENT YOUNG: The Chair is not quite clear about what you have had in the past.

DIRECTOR MACKINNON: I have reference to the reports with regard to the abuses in the use of badges in securing admission to the meetings of active members.

PRESIDENT YOUNG: We should defend the name and honor of the teachers.

DIRECTOR MACKINNON: That is what I had in mind, by safeguarding admission in such a way that it will be impossible for such charges to be made. I believe these charges will be made as long as there is an opportunity for securing admission to these meetings by improper means.

DIRECTOR SCRIBNER: Your tellers report 35 votes cast, of which J. Stanley Brown received 18 and James Y. Joyner, 17.

PRESIDENT YOUNG: You have heard the report of the tellers. The Chair declares Mr. J. Stanley Brown elected as a member of the Board of Trustees to fill the vacancy occasioned by the resignation of Dr. Nicholas Murray Butler.

A Director: May I ask whether that announcement of the Executive Committee with reference to admission is final? I make the inquiry as a personal privilege, notwithstanding what the Chair has said about the teachers' ability to keep their badges. I had in mind that the badges would be of no further use and so I expected to be admitted to meetings of active members by my certificate of membership.

President Young: The Chair has appointed two members of the Executive Committee to pass on all cases in which there is any doubt, so there will be a committee in attendance at the entrance that will pass on you.

I see the difficulty; but on the preliminary program, which we all had long ago, the admission was treated the same way it always had been in the history of the Association. I did not see the final official program until after I reached San Francisco, and I suppose it is quite a dreadful thing for me to acknowledge that I did not notice the change until my attention was called to it. I think that if the certificates had been made smaller they would have better fitted the condition of women's pockets nowadays; on the other hand, the women are so fond of wearing a badge of some sort that I think every woman will have a badge. Now, with regard to safeguarding admission by the use of certificates, I see your point, only I have more faith in teachers than you have.

Director MacKinnon: I am not calling into question the integrity of the active members of the Association. I had reference solely to the reports that had been in circulation thruout the United States with regard to meetings in the past, that the right has been abused, and that there has been illegal voting. Whether or not these reports are true, it reflects upon this great Association, and it is belittling to the Association; and if there is some means by which this can be absolutely safeguarded, I am in favor of it. I would like to ask you, Madam President, if it is within the province of this Board of Directors to determine this matter, or if it is in the hands of the Executive Committee. If the former, I would like to make a motion in regard to it.

President Young: The Chair would say she does not believe it is in the hands of either. It is a mere matter of official detail that is in the hands of the Secretary. The Executive Committee thought it was a great misfortune that the Secretary did not make this change until so late an hour. That is the point; and therefore the Executive Committee thought it well to advise the Secretary not to make that change this year, but next year, if it was so desired—to have a ticket of reasonable size and make the change. Supposing 50 per cent of the active members come there without their tickets or because they had not seen the final program, then what are you going to do? If, on the other hand, 50 per cent come without their badges, what are you going to do?

Director Scribner: To provide for that possible contingency, I would move that those who attend the door be instructed to admit all active members if they prove that they are active members, whether they have badges or certificates, or not. I believe the Constitution provides that only active members shall vote. It is not the purpose of anybody connected with this Board of Directors to deprive an active member of his rights, but as Director MacKinnon has said, it has been the gossip that in many cases active members who could not go or did not care to go to the meetings of active members for the purpose of transacting business, would lend their badges to someone else. That is not fair, and we as teachers and representatives of the greatest educational body on earth must play fair. We want everybody to know that we are playing fair, and I know that there is no one here and no active member thruout the United States connected with the Association who does not stand for fair play. If we have differences we must fight fairly, and let the public know that we fight fairly. So I make the motion that all active members who present themselves at the door, if they satisfy the door-tenders that they are active members, be admitted and allowed to vote.

Director Pearse: It seems to me that there is a little history connected with this action of the Executive Committee which we ought not to forget. It has been

the custom of the Association that persons be admitted to the meetings of the Association, and to the business meetings, and authorized to vote, upon showing their active-membership badges. This is the custo n of the Association. When the preliminary programs or bulletins were sent out this year, no announcement was made and no information had been supplied to the State Directors that a change in this plan would be followed; if so, it has not become generally known to the membership. Upon arriving in San Francisco, the Executive Committee ascertained that many teachers were not informed of the change; that the notice contained in the official program placed in the hands of teachers upon their arrival here, which notice would be seen by some before the meeting today, the first day, but which a great number would not see, was certain to result in great confusion and in the loss of privilege to many. The Executive Committee, after considering that fact, ordered, since the notice had not been given previously and since the change now came with such short notice that many would not and could not get it, that the custom which had prevailed heretofore should be continued for this convention. If it should be thought best hereafter to admit upon certificate, there will be time to announce it in advance for another year. If an explanation of the change had been placed in the preliminary notice it might have been done this year; but to require a teacher who comes to the meeting of active members with merely an active-membership badge, to establish the fact of membership when hundreds of people are pressing to get into the place of meeting, would be an exceedingly difficult and impracticable scheme, it appears to me. There has been some gossip about irregularities; there doubtless will be gossip about various matters while the world stands. And it appears to me that it would be wiser for us, as Directors, not to interfere with the arrangement which the Executive Committee has already made for use this year. If at the close of this annual meeting it is thought best to change the plan and use the ticket of admission instead of the badge, no one will object; but there is no reason why we should not make this thing definite and provide that the valuable privilege of membership shall be exercised by those entitled to it and by those only. It is felt by thousands of teachers that the notice has been so short that hardship will follow should certificates of membership be required for admission.

Director Kirk: If this matter has been examined and felt by thousands of teachers, I do not see but that ample notice has already been given. I may have misunderstood the Chair, but I understood that it was the opinion of the Chair that there was really no authority or occasion for either the Executive Committee or the Board of Directors to act upon it; that it was rather a matter of the judgment and convenience of the Secretary.

President Young: Not necessarily a matter of convenience, but a matter of official detail.

Director Kirk: If it is a matter of official detail for the Secretary, I hardly see on what grounds the Executive Committee can defend their changing it, and I can hardly see on what grounds the Board of Directors could take up the matter and alter an order of the Executive Committee. Now, this is a new matter to me, and I have learned in politics and in education that when ugly rumors get to going, as good a way as any is to probe them to the bottom. I wonder what caused the Secretary or any person to alter this scheme of admission. He must have had intimations of some sort or other. I should like to inquire, if I may, for my own information and others that might be interested—I should like to inquire of the Secretary for what reasons he made this new arrangement. If there was only a slight rumor of irregularities, why, it would not seem to me that he had a very good basis for taking such action, but if he has information which the rest of us do not have, I believe we ought to have that information, even tho I am in doubt about the legality or advisability of this Board's or of the Executive Committee's action in the matter. I am perfectly willing to abide by the ruling of the Chair.

DIRECTOR SCRIBNER: I wish to state that I would like to hear from the Secretary if it is in order.

DIRECTOR GREENWOOD: I am not a member of the Executive Committee. If they have information that they do not want to become public, we might appoint a committee to investigate and see what they have and report to this body. I do know that there have been rumors that matters were not as straight as they ought to be. I agree with Director MacKinnon that we ought to have our business so aboveboard that there could not be any question about it, and that only bona-fide active members should take part in the proceedings of the meeting of active members. I am in favor of admitting every bona-fide active member, but I would not be in favor of any person's being admitted on the certificate or badge of another person.

DIRECTOR SCRIBNER: Only active members have a right to vote, and it seems to me the duty of the National Education Association to require the Constitution to be lived up to in the matter of voting. I fail to see how anybody entitled to vote shall be deprived of the privilege to vote by any provision of this body or any other body.

PRESIDENT YOUNG: The Chair will make a ruling, and if the Board is not satisfied it can reverse the ruling. The Chair will make the ruling that the requirement laid down in the final official program shall be lived up to, and that the Executive Committee and the Board of Directors have no authority to deal with this question. The Chair goes farther and insists that the committee which was appointed yesterday from the Executive Committee, and a committee of two from this Board, to be appointed by the Chair, shall be present at the door of the hall in which the active members are to meet on Thursday noon to hear all complaints—of those who claim that they did not understand the situation and of all others—and to pass upon the cases so that, as Mr. Scribner says, no active member shall be cut out from voting.

DIRECTOR MACKINNON: In accordance with your ruling, I would like to move that the Board of Directors request the press of the city to give this ruling of the Chair the widest possible publicity, in order that the active members may know and may come prepared with their certificates to the business meeting on Thursday noon, and also at the meeting by states this afternoon.

DIRECTOR PEARSE: The decision of the Executive Committee that members would be admitted to meetings, business and otherwise, upon the showing of the active-membership badge was announced by the Executive Committee yesterday and was made known to a great many teachers. It is too late for this information to be supplied to the newspapers to do any good for the teachers attending the meeting this afternoon. If this ruling is to stand I want to second the suggestion of Mr. MacKinnon in regard to publicity, otherwise there will be great difficulty and great hardship.

DIRECTOR FOULK, of West Virginia: May I suggest to the gentleman who last spoke that the meetings of active members to be held this afternoon are within the control of the respective State Directors, who will see that no one votes improperly, and therefore there is no difficulty on that score?

DIRECTOR SCRIBNER: He will have a list of the active members in attendance at this convention.

PRESIDENT YOUNG: Is the ruling of the Chair sustained? Does anyone want to make a motion that the ruling be not sustained? Did you make a motion, Director MacKinnon?

DIRECTOR MACKINNON: I made a motion that the press of the city be requested to give the widest publicity to the fact that the admission to the annual meeting of active members in Golden Gate Commandery Hall on next Thursday noon shall be by certificate, as announced in the official program and as confirmed by the ruling of the Chair.

The motion was duly seconded, presented, and carried.

PRESIDENT YOUNG: The Chair will appoint Director MacKinnon, of California,

and Director Hampton, of Florida, as the representatives from the Board of Directors to act with the committee appointed by the Executive Committee.

DIRECTOR MACKINNON: I would suggest that you enlarge that committee with representatives from all sections of the United States.

DIRECTOR JAMES Y. JOYNER, of North Carolina: As a member of the Executive Committee, I think we are making a mistake in this. The idea of appointing a committee representing all sections of this country to stand guard over the teachers, to admit them into this meeting of the active members, is a reflection upon our profession. I am opposed to that. There may have been abuses in the past. The idea of the Executive Committee as I understand it was simply this: Heretofore the blue badge of active membership has been accepted as prima-facie evidence of active membership. The Constitution says that nobody shall be allowed to vote in the meeting of active members who is not an active member. The determination of who active members are before they are admitted is in the hands of the Secretary and is a matter of executive detail. We saw no reason at this late date for changing the prima-facie evidence of membership; in fact, we felt that changing the rule of admission at this time without having given more notice of it would work a hardship and would be in itself an intimation that a great many frauds were going to be perpetrated.

DIRECTOR GREENWOOD: I rise to a point of order.

DIRECTOR JOYNER: I am speaking to the motion of appointing representatives from all sections of this country to stand guard at the door.

DIRECTOR GREENWOOD: I do not understand that there is a motion before the house.

DIRECTOR JOYNER: I may have misunderstood it.

PRESIDENT YOUNG: The Chair did not understand that Mr. MacKinnon meant to stand guard. He meant that it should be an easy matter for everybody to be recognized, but I think that would be impossible.

DIRECTOR MACKINNON: It was my idea that we might add one or two more to the committee.

DIRECTOR JOYNER: I think it is perfectly proper to have a committee to rule upon any matters of doubt, but I still think badges ought to be taken as prima-facie evidence of membership, and if there is any question as to membership in any particular case, just refer them to this committee.

PRESIDENT YOUNG: It is left to the discretion of the Chair to increase the size of that committee as the Chair thinks best.

DIRECTOR JOHN H. PHILLIPS, of Alabama: Madam President, I appear before the Board of Directors on behalf of the Executive Committee. You will recall, after the meeting of the Executive Committee which was held in Mobile, the Secretary was directed to secure by correspondence a vote of the Board of Directors upon certain resolutions that had been adopted by the Executive Committee with reference to a certain class of membership relative to which there had been no special regulation adopted by the Association. A referendum vote was taken by correspondence and the vote was, I think, that out of the 76 members of the Board of Directors there were 60 that responded, 59 of whom favored the adoption of the resolution; but as the validity or legality of that vote has been called in question, the Executive Committee unanimously thought it wise to ask this Board of Directors to ratify here in this meeting the action of the Executive Committee with regard to this matter, until such time as the Association may take such action as they deem necessary with regard to this question. To facilitate this matter I will just read the resolution. (Reads:)

WHEREAS, The By-Laws of the National Education Association do not provide adequately for the rights and privileges of institutional membership; and

WHEREAS, In the absence of such regulations the Executive Committee has been called upon to interpret the rights of this class of members to meet emergencies and

complications which have arisen since the adoption in 1907 of the plan of incorporation under a special act of the United States Congress; the Executive Committee respectfully requests the members of the Board of Directors to ratify by correspondence vote the following resolutions:

1. *Resolved*, That institutions may be enrolled as active members of the National Education Association.

2. *Resolved*, That institutions may be enrolled as active members by their chief administrative officer only.

3. *Resolved*, That active membership of institutions does not carry with it any voting rights.

4. *Resolved*, That a special membership badge bearing the title "Institutional Member" may be issued to the chief administrative officer of an institution enrolled as an active member or, in the absence of such officer, may be issued to any person regularly connected with such institution in an educational capacity in whose favor said chief administrative officer directs on an official blank which may be secured from the Secretary of the Association.

Respectfully submitted,

(Signed) *Executive Committee*
ELLA FLAGG YOUNG, *President*
JAMES Y. JOYNER, *First Vice-President*
NICHOLAS MURRAY BUTLER, *Chairman of Trustees*
DURAND W. SPRINGER, *Treasurer*
JOHN H. PHILLIPS, *Member by election*

These resolutions are signed by all the members of the Executive Committee, and were unanimously adopted, and we request on behalf of the Executive Committee the ratification of the correspondence vote on these resolutions in order to avoid any question regarding their legality.

DIRECTOR SCRIBNER: I move that the resolutions presented by Director Phillips and the resulting correspondence vote by the members of the Board of Directors be ratified and approved.

The motion was duly seconded.

PRESIDENT YOUNG: You have heard the motion. Are there any remarks?

DIRECTOR CRABTREE, of Nebraska: May I not inquire whether these resolutions are not in effect amendments to the By-Laws?

DIRECTOR PHILLIPS: I beg to explain that in the opinion of the Executive Committee they are merely interpretations of regulations, or rather, statements of detail where there are no regulations now controlling and directing, as stated in the preamble to the resolutions.

DIRECTOR SCRIBNER: They have to be voted on by the full membership.

DIRECTOR PHILLIPS: Provision will be made later to amend the By-Laws.

DIRECTOR CRABTREE: There is one resolution that I personally would not want to approve of, and that is the one making institutions active members. If these resolutions are to be adopted at all I should want to change the word "active" there to "associate."

DIRECTOR SCRIBNER: They are institutional members according to the resolution.

DIRECTOR CRABTREE: I would like to ask whether I was mistaken on that point, as to whether the institutions were to be active members?

PRESIDENT YOUNG: They were to be active members with an institutional badge, which would not give them voting rights.

DIRECTOR CRABTREE: Personally I would not approve of making institutions active members.

DIRECTOR SPRINGER: May I simply say that the final action will necessarily take place at the time of the annual meeting? A formal notice will be given on Thursday next for an amendment to the By-Laws, which under the By-Laws will have to lie over for one year before action can be taken thereon.

DIRECTOR CRABTREE: Can you not then include that in the resolution, that they are to be held over for action?

DIRECTOR JOYNER: Mr. Springer and I discussed this very thoroly. These resolutions practically amount to a request that a By-Law be adopted in accordance with the Constitution, which requires this to go over for a year.

PRESIDENT YOUNG: I understand the objection to Director Scribner's motion is withdrawn. All in favor will signify it by saying, Aye. Opposed, No. The motion is carried.

DIRECTOR SPRINGER: I have a communication of which I wish to read two sentences; after that, whether this communication ever sees any more light will depend upon your action. It reads:

In view of the widespread notoriety which the newspapers of the country have given the finances of the National Education Association and the uncertainty as to the exact situation which many members of the Association feel because of said newspaper reports, I have made a comparison and verification of the reports of the Secretaries and Treasurers of the Association and of the Board of Trustees since the year 1884. While this examination was made to satisfy my own curiosity, I am prompted to offer you the information which I obtained from such an examination.

PRESIDENT YOUNG: Who prepared this?

DIRECTOR SPRINGER: I did this work myself. I will say that I am a certified public accountant, and being such, and happening to be the Treasurer of the Association, I took the time at odd moments since our last meeting a year ago to satisfy my curiosity as to the accounts of the Treasurers of the Association in former years. Whether you people want to hear it or not depends upon your choice. I do not want it to appear at all, as one of the morning papers said, as an act of impertinence. There has been no request that this paper be prepared.

It will take about six minutes.

At the request of several members, President Young invited Treasurer Springer to read the paper in full. Treasurer Springer read as follows:

DETROIT, MICH., June 26, 1911

To the Board of Directors, National Education Association:

In view of the widespread notoriety which the newspapers of the country have given the finances of the National Education Association and the uncertainty as to the exact situation which many members of the Association feel because of said newspaper reports, I have made a comparison and verification of the reports of the Secretaries and Treasurers of the Association and of the Board of Trustees since the year 1884. While this examination was made to satisfy my own curiosity, I am prompted to offer you the information which I obtained from such an examination. You will bear in mind that this was an examination and not an audit. Vouchers were not sought, for reasons which will appear later.

HISTORICAL

The first report of the Board of Trustees was made at Chicago, July 12, 1887, and was signed by Mr. N. A. Calkins, as Chairman, and Messrs. Richards, Tarbell, and Eaton. The report contains the following resolution which had been adopted by the Board:

"*Resolved*, That the Chairman of the Board of Trustees is hereby declared to be the executive officer of the Board, and he is duly empowered to act for and in behalf of said Board in the transaction of its ordinary business, essential to be conducted during the intervals between the meetings of the Trustees."

The report declares that this was done to avoid delay in the payment of bills, and the rule was to stand until further action.

The report recites the further fact that the Permanent Fund consisted previous to that time of $200, the proceeds from the sale of two life-directorships prior to 1884; $3,000, the surplus from the 1884 meeting; $100 received from a life-directorship in 1885; $400 received from four life-directorships in 1886; and $775, the surplus from the 1886 meeting; making the total amount of the Permanent Fund at that time $4,475, which had been invested in interest-bearing securities, except the surplus from the last meeting. This amount has been added to from time to time, until now the Permanent Fund has reached the sum of $180,000, when the securities are listed at their cost or book value, or $182,000 when listed at par value.

The report for 1895 was the last one signed by Mr. Calkins as Chairman and it was the first one signed by Mr. A. G. Lane as a member of the Board of Trustees.

The report for 1896 shows that Mr. Horace S. Tarbell was Chairman and the name of Mr. Nicholas Murray Butler first appears as a Trustee.

The report for 1897 was signed by Mr. A. G. Lane as Chairman.

The twentieth Annual Report, issued under date of December 1, 1906, chronicles the death of Mr. Lane and is signed by Mr. Butler, as Chairman. I quote from it this tribute to Mr. Lane:

"To him, more than anyone else, is due the credit of the present admirable condition of the Permanent Fund of the Association. His unbending integrity, his unselfishness, and his generous spirit of service remain an example and an inspiration not only to his colleagues but to the entire membership of the Association, of which he was a distinguished ornament."

FINANCIAL REPORTS

The financial reports of the various officers tally, except for the year 1896, when there is a difference of $24.55 between the amounts of interest receipts as given by the Board of Trustees and the Treasurer.

In the report of 1897, however, there appear four correcting entries, with this footnote:

"The corrections in the above report were indicated by Charles C. Hoyt, Accountant, who examined the books and vouchers kept by the Treasurers and by the late N. A. Calkins, who, as Chairman of the Board of Trustees, received and disbursed current funds of the Association. Since the Denver meeting (in 1895) the current funds of the Association have been handled by the Treasurer and the Permanent Funds by the Board of Trustees."

The report of the Board of Trustees for 1901 is the first in which appears a detailed statement of income receipts.

The reports for 1908 contain adjusting entries due to the fact that the Board of Trustees decided to carry all securities at cost or book value rather than at par value, as had been done heretofore.

Since 1898, the date on which all securities were acquired has been added to the Annual Reports of the Board of Trustees.

The Emergency Fund, established in the early nineties, was the designated fund under which expenditures were made for educational investigations. The Board of Directors voted the amounts, which were expended under the direction of the Board of Trustees, but incomplete reports were given as to how it was expended. Beginning with 1896, these expenses are listed in detail and the Emergency Fund dropped.

In the early years a complete separation was not made in the accounts between the expenses of the Trustees and of the Custodians.

SYSTEM OF AUDITS AND CARE OF SECURITIES

Every Treasurer's report, except that for 1897, bears a certificate to the effect that the books and vouchers had been examined and found correct. An audit was made by a public accountant in that year, but for some reason the certificate was not attached to the report in the printed volume of *Proceedings*. Before 1887, the examination was made by auditing committees and since that time by the Board of Trustees or by public auditors, and in many years by both. Since 1903 the books of both Secretary and Treasurer have been annually audited by the International Audit Company of Chicago, the Board of Trustees having directed the same to be made.

In the second report of the Board of Trustees, dated June 30, 1888, it is declared that all securities belonging to the Permanent Fund are deposited in the Nassau Safe Deposit Company of New York City. The policy of having a regular depository for the securities has been followed. One year the safe deposit vault in Providence was used, for several years the Merchant's Safety Deposit Vaults of Chicago were used, and since 1905 the First Trust and Savings Bank of Chicago has been the custodian of the funds. Each year since 1906 a statement similar to the one on the present report of the Board of Trustees has been given by Mr. Louis Boisot, its Trust Officer.

In the third report of the Board of Trustees, made in 1889, they recommended that the By-Laws of the Association be amended by adding the following:

"Sec. 5. It shall be the duty of the President, Secretary, and Treasurer of the Association to appoint annually a competent person to examine the securities of the Permanent Fund held by the Board of Trustees; and his certificate showing the condition of the said fund shall be attached to the report of the Board of Trustees."

That amendment was carried and every Annual Report of the Board of Trustees since that date, excepting 1896 when the report was examined by Messrs. Lane, Butler, and Wilson, bears a certificate of the examiners so appointed to the effect that the securities indi-

cated by the reports were actually in the depository named. Whenever any securities were in the process of settlement that fact was indicated in the statement of the examiners, who have been men of sterling integrity in either the teaching or accounting profession.

SOURCES OF PERMANENT FUND

An examination of the Secretary's reports, in connection with the financial reports, shows that the Permanent Fund has been entirely the result of favorable arrangements made with the railroads under which the Association received an annual membership fee from a large number of tourists who were attracted by the advantageous rates secured.

Since 1894, membership fees have been collected from 213,201 persons. During that time, volumes of *Proceedings* to the number of 132,850 have been printed, of which 12,000 are still on hand and 5,912 have been sold, leaving 114,938 volumes distributed to members. It is safe to suppose that every teacher who became a member of the Association, either active or associate, desired a copy of the *Proceedings*, and that those who did not fill out the blanks by which they could be secured were transient members. The above figures show that since 1894, 98,263 persons paid membership fees who were not teachers. This produced an income of $196,526 while the additions to the Permanent Fund in that time have been but $140,000. The percentage of transients has run as high as 53 in a single year, and additions to the Permanent Fund have never been made in any year when the percentage was less than 30, except once.

LOSS OF FUNDS

The report for 1894 contains the first reference to the troublesome investments in Kansas. That report shows that interest coupons to the amount of $111 had not been paid during the year. The default in the interest continued for several years, the largest amount defaulted on in any year being in 1898, when interest was not paid on investments of $9,650. At the annual meeting in Washington for that year, as recorded on p. 31 of the *Proceedings*, Superintendent A. G. Lane, of Illinois, Chairman of the Board of Trustees, spoke as follows:

"I was somewhat surprised at the close of the meeting in Milwaukee in 1897 to read in some of the public-school journals statements regarding the condition of the funds in the custody of the Board of Trustees. I made several full statements to the Board of Directors and a complete statement has been published in the printed *Proceedings* of the last two years and will be printed in the *Proceedings* of this meeting, giving the fullest possible information to the members of this Association. Some question has been raised about some of the funds, notably the deferred payments of interest and principal, but all those were concerning investments made before any of the present members of the Board of Trustees had anything to do with the funds. They were investments made in good faith at the Topeka meeting of 1886 and the Chicago meeting of 1887. The Trustees are using due diligence to collect these amounts. If there are any members of the Association who desire information in regard to the condition of the funds of which I am custodian, as Chairman of the Board of Trustees, I want to give it to them now on this floor."

No request for information offered by Chairman Lane was made.

In the report of the Board of Trustees for December 1, 1906, the first following the death of Mr. Lane, a detailed statement of the condition of the fund was presented, which statement had been prepared by Mr. Louis Boisot, Trust Officer of the First Trust and Savings Bank of Chicago. This report shows that all the Kansas securities had been disposed of by compromise or settlement, with a loss to the Association of $2,250 on the principal.

The interest loss to the Association is not shown in the report, but I have computed the same to have been $4,794, entirely on school and municipal bonds of the state of Kansas.

At the time of the 1895 Denver meeting, funds were deposited in the Union National Bank of that city, which went into the hands of a receiver, and in the settlement, the Association sustained a loss of $15.74.

By order of the Board of Directors, July, 1891, an investment of $1,000 was made for stock in the Henry Barnard Publishing Co. No further record concerning this investment appears in any of the books. The transactions did not pass thru the hands of the Board of Trustees.

INVESTMENT

Beginning with the first investment of $3,000 in Providence, R.I., in the form of real-estate mortgage, every investment has been traced, showing the source of the money from which each investment was made and the disposition of the proceeds secured from its payment.

In the early reports of the Trustees, the investment made in Kansas bonds were lumped under one head, but in 1896 a detailed list of the Kansas bonds was given, which

list tallies with the totals up to that point, and by which it was possible to work backward and secure a complete record. All other securities or investments have been detailed from the beginning.

The report for 1908 shows that the Association had taken title to the property at 4672 Lake Avenue, Chicago, under proceedings for the foreclosure of a mortgage of $5,500. Whether this property will pay out for the investment, remains to be seen.

The present investments are listed in the annual report of the Board of Trustees for this meeting.

INCOME

The tracing of the income from the permanent investments was a more difficult problem, owing to the fact that prior to 1901 a detailed statement of income receipts had not been published with the reports; neither had the dates been given on which securities had been acquired. By means of voucher numbers, a fairly accurate time could be estimated for determining the amounts of interest earned and comparing the same with the total interest receipts reported for the year. No income was lost except as noted in another paragraph and all income earned has been accounted for.

CONCLUSIONS

If desired, this report can be supplemented by tables showing by years: First, auditors of Treasurers' Reports; second, examiners of securities held by the Board of Trustees; third, estimated interest earned; fourth, interest collected; fifth, additions to Permanent Fund; sixth, losses incurred; seventh, the history of every investment made.

Every dollar ever transferred to the Permanent Fund has been accounted for and is now accounted for by the securities in the custody of the First Trust and Savings Bank of Chicago, as listed in the report of the Board of Trustees for 1911, except as previously noted.

The income from the investments has been accounted for except as has been indicated.

All of which is respectfully submitted.

(Signed) DURAND W. SPRINGER,
Certified Public Accountant

DIRECTOR GREENWOOD: Regarding the $1,000 voted to Mr. Henry Barnard. As I remember it now, Mr. Barnard, years before the action referred to, had published those remarkable educational volumes of his, entitled *American Journal of Education*. Years ago he was at a meeting of the Association, and out of respect to him and to the great work that he had done some forty or fifty years before in the publication of these volumes, a thousand dollars were appropriated as a gratuity to Henry Barnard who was then more than eighty-five years old. My impression is that the Association secured the plates, and this, I think, will explain the thousand dollars appropriated as the Henry Barnard Publication Fund.

DIRECTOR SPRINGER: I merely recited the facts, recited every fact concerning which there could be any controversy.

DIRECTOR GREENWOOD: I move that this report which Treasurer Springer has presented, be published with the tables in the minutes of this meeting.

PRESIDENT YOUNG: I think that Mr Springer should have some compensation for his time spent on the preparation of this report. You have heard the motion that the report be printed in the *Proceedings*. All in favor of the motion will signify it by saying, Aye. All opposed, No. It is so ordered.

THE SECRETARY: There are two more communications: Horace H. Cummings, of Utah, who was appointed by the Department of Superintendence at the Chicago meeting, with others, to attend the Centennial at the City of Mexico and the Educational Congresses at that time. Mr. Cummings understood, and was informed by the secretary of the Department at that time, that there would be an appropriation for his expenses. He wrote to me about it and I replied that there was no record of any authorization of expenses of that kind. I have no record that the Department of Superintendence passed such a motion, and their motion would be of no effect until the Board of Directors of the National Education Association had made the appropriation for expenses, and there was no record of such action there. He simply brings in his bill and asks me to present it to

the Board of Directors at this time. I am simply presenting it according to his request, stating the facts in regard to it.

Another communication is from Mr. Charles I. Rice, of Massachusetts, who was president of the Department of Music at the Boston convention. He referred to a committee of the Department of Music Education, appointed years ago. He has been reporting on certain matters concerning music.

Another similar application comes from a committee of the Department of Manual Training and Art that has had under consideration the subject of admission to college as related to the subjects of Manual Training and Art. They have expended $27.05, for which they ask to be reimbursed, and they ask also thru the present president of this Department, Mr. C. B. Connelley, for an appropriation of $60 for further expenses. There has not at any time been any authorization of expenses for this purpose. These expenses have been incurred and these bills are submitted for your consideration.

DIRECTOR SCRIBNER: It is getting rather late. I move that those communications be referred to the Committee on Investigations and Appropriations of the National Council, with instructions to report with recommendations to the new Board of Directors that meets on Thursday afternoon.

The motion was formally seconded, presented, and carried.

PRESIDENT YOUNG: As there is no further business to come before this Board, we will stand adjourned.

IRWIN SHEPARD, *Secretary*

Approved,

ELLA FLAGG YOUNG, *President*

MINUTES OF THE MEETING OF THE NEW BOARD OF DIRECTORS FOR 1911–12

The meeting of the new Board of Directors was called to order in the Green Room of the St. Francis Hotel, San Francisco, at 4:30 P.M., July 13, 1911, by President-elect Carroll G. Pearse, in accordance with Article IV, Section 4, of the By-Laws, requiring that each new Board of Directors shall be organized at the session of its election.

The following members responded to the roll-call:

Carroll G. Pearse, Wisconsin; Ella Flagg Young, Illinois; Irwin Shepard, Minnesota; Katherine D. Blake, New York; James M. Greenwood, Missouri; James Y. Joyner, North Carolina; Eliphalet O. Lyte, Pennsylvania; John H. Phillips, Alabama; A. J. Matthews, Arizona; Mark Keppel, California; James B. Ragan, Colorado; Clem Hampton, Florida; Grace M. Shepherd, Idaho; William H. Campbell, Illinois; Thomas A. Mott, Indiana; O. P. Bostwick, Iowa; John MacDonald, Kansas; W. P. King, Kentucky; Thomas D. Boyd, Louisiana; Robert J. Aley, Maine; Robert J. Fuller, Massachusetts; E. E. Scribner, Michigan; S. L. Heeter, Minnesota; E. E Bass, Mississippi; John R. Kirk, Missouri; C. A. Duniway, Montana; G. W. A. Luckey, Nebraska; Mrs. L. C. Booth, Nevada; M. P. E. Groszmann, New Jersey; W. E. Garrison, New Mexico; F. M. Harper, North Carolina; E. M. Van Cleve, Ohio; William F. Ramey, Oklahoma; L. R. Alderman, Oregon; Reed B. Teitrick, Pennsylvania; M. M. Ramer, South Dakota; J. J. Keyes, Tennessee; George H. Carpenter, Texas; C. E. Beach, Washington; Emma J. Gardner, Wisconsin; C. O. Merica, Wyoming; Willis T. Pope, Hawaii; G. N. Anderson, Philippine Islands.

Directors present, forty-three.

PRESIDENT PEARSE: The first item of business for this meeting is the election of two members of the Board of Trustees, one to succeed Trustee H. B. Brown, of Indiana, whose term expires with this meeting, the other to fill the unexpired term for one year of the President-elect of the Association, who becomes *ex officio* member of the Board of Trustees for the term of his office.

Director Thomas A. Mott, of Indiana, nominated President Robert J. Aley, of the University of Maine, as a member of the Board of Trustees for the period of four years to succeed H. B. Brown, of Indiana.

At this point several directors, including Director John MacDonald, of Kansas, and Directors James M. Greenwood, of Missouri, and Carroll G. Pearse, of Wisconsin, who had served with Trustee Brown on the Board of Trustees during the past four years, spoke in high commendation of the services of Trustee Brown during the term of his office, just closed.

On motion, duly seconded and carried, the Secretary was instructed to cast the unanimous ballot of the Board of Directors for Robert J. Aley as member of the Board of Trustees for four years. The Secretary reported the ballot cast as directed.

Director John H. Phillips, of Alabama, presented the name of James Y. Joyner, of North Carolina, as member of the Board of Trustees for the unexpired term of one year to succeed Trustee Carroll G. Pearse, elected President.

Director R. B. Teitrick, of Pennsylvania, moved that the Secretary be directed to cast the unanimous ballot of the Board of Directors for the election of James Y. Joyner as member of the Board of Trustees for one year. The motion was duly seconded, presented, and carried, and the Secretary reported the ballot cast as directed.

PRESIDENT PEARSE: The next item of business is the election of a member of the Executive Committee to succeed John H. Phillips, of Alabama, whose term expires with this meeting.

Director James M. Greenwood, of Missouri, presented the name of John H. Phillips

to succeed himself as member of the Executive Committee, and Director James Y. Joyner, of North Carolina, moved that the Secretary be instructed to cast the unanimous ballot of the board for Mr. Phillips to succeed himself.

At this point Katherine D. Blake, of New York, moved an amendment to the preceding motion, that the name of Mr. James Ferguson, of California, be substituted for that of Mr. John H. Phillips. This motion was duly seconded.

The Chair ordered that a ballot be taken to determine the choice of the Board of Directors between the two nominees for the office of member of the Executive Committee, and appointed as tellers Directors John MacDonald, of Kansas, and E. E. Bass, of Mississippi. The ballot was duly taken, resulting as follows: of 43 votes cast, John H. Phillips, of Alabama, received 26; James Ferguson, of California, received 16; Jame Y. Joyner, of North Carolina, received 1. The President then declared John H. Phillips, of Alabama, elected as member of the Executive Committee for the period of one year.

PRESIDENT PEARSE: It is the duty of this board to elect ten members of the National Council to succeed the ten members whose terms of office expire at this meeting. I will appoint as a nominating committee for this purpose, Directors James M. Greenwood, of Missouri, Robert J. Aley, of Maine, and James Y. Joyner, of North Carolina, and suggest that they withdraw at this time and prepare their report for presentation later at this meeting.

At this point a report from the Committee on Investigations and Appropriations of the National Council of Education was presented, recommending to the Board of Directors that the following amounts, or so much thereof as might be necessary, be appropriated for the following-named committees of investigation:

Committee on Uniform Records and Reports	$500
Committee on Articulation of High School and College	300
Committee on National Geometry Syllabus	300
Committee on Cosmopolitan High School	300
Committee on Conservation of Vision	500
Committee on Rural Schools	1,000
Committee on Economy of Time in Education	300
Total amount recommended	$3,200

The following additional requests for appropriations were referred back to the Board of Directors without recommendations:

The expenses of Mr. Horace H. Cummings, of Salt Lake City, in visiting Mexico as a delegate to the Mexican Centennial in 1910	$100.00
Expenses of the Committee of the Department of Music Education on Musical Terminology.	25.00
Appropriation for a committee of investigation to be created, on grammatical nomenclature	250.00
Expenses for a committee of the Department of Manual Training and Art Education, as follows:	
For expenses already incurred	27.05
For expenses for the coming year	60.00

A communication from Mr. James A. Barr, president of the Department of Rural and Agricultural Education, for an appropriation of $250 for a committee of investigation was reported by the Committee of the Council as held over for later consideration.

Director E. E. Scribner, of Michigan, moved that the recommendations of the report of the Committee on Investigations and Appropriations of the National Council, recommending appropriations to the amount of $3,200 for specific committees of investigation, be received and adopted as read. This motion was duly seconded, presented, and carried by unanimous vote.

At this point the Secretary presented to the Board of Directors the following resolution, which had been passed at the meeting of active members held at noon of the same day, as follows:

Resolved, That the President of the National Education Association be authorized to appoint a committee consisting of seven active members, to consider and report to the Association its findings and recommendations concerning the salaries, tenure, and pensions of teachers; the committee to take into consideration, among other things, increased cost of living, the increased professional demands upon the time, strength, and funds of teachers, and whether the increase in teachers' wages has kept pace with the increase in the wages of other workers, the increase in the cost of living, and the increased demand for teachers; and

Resolved, That the Board of Directors of this Association be and hereby is instructed to set aside an appropriation from the current funds of the Association the sum of $3,000, the same to be used, or as much thereof as may be necessary, for the purposes of the investigation and to enable the committee to report as directed herein.

Director John R. Kirk, of Missouri, moved that the sum of $1,000 be set aside for expenses of the proposed committee each year for each of the three following years, to apply on the investigation proposed. This motion was seconded by Director John MacDonald, of Kansas.

After discussion, Director James Y. Joyner, of North Carolina, offered as a substitute motion that the $3,000 recommended by the active members be appropriated at the present time, to be used as needed. The original motion by Director Kirk was then withdrawn, and the substitute motion, being duly seconded and presented, was passed without dissent.

On motion of Director John H. Phillips, the bill of expenses of Mr. Horace H. Cummings was, after discussion and explanation, authorized.

On motion of Director L. R. Alderman, of Oregon, it was ordered that the request of the Committee on Musical Terminology of the Department of Music Education be not granted at the present time, but that it be re-referred to the Committee on Investigations and Appropriations of the National Council for further consideration and for report at the next meeting of the Board of Directors.

On motion of Director E. E. Scribner, of Michigan, it was ordered that the application for an appropriation of $250 for the expenses of the Committee on Grammatical Nomenclature be referred back to the Committee of the National Council on Investigations and Appropriations for investigation and a report at the next meeting of the Association.

On motion of Director Ella Flagg Young, of Illinois, it was ordered that the President of the Association appoint a committee of five members of the Association on the subject of grammatical nomenclature, to act in conjunction with similar committees from the American Philological Society and the Society for the Teaching of Foreign Languages.

On motion of Director E. E. Scribner, of Michigan, the request of the Department of Manual Training and Art Education for an appropriation for expenses already incurred of $27.05 and for expenses to be incurred, was referred back to the Committee of the National Council on Investigations and Appropriations for further consideration.

On motion of Director Groszmann, of New Jersey, it was ordered that the application of Mr. James A. Barr, president of the Department of Rural and Agricultural Education, be referred to the committee which will have the responsibility of the expenditure of $1,000 as expenses for investigation of rural and agricultural subjects.

At this point the report of the Committee on Nomination of Members to the National Council was presented, as follows:

William H. Bartholomew, Louisville, Ky., to succeed himself—term to expire in 1917.

Frank A. Fitzpatrick, Boston, Mass., to succeed himself—term to expire in 1917.

William B. Owen, Chicago, Ill., to succeed I. C. McNeill, Harrisburg, Pa.—term to expire in 1917.

Eliphalet O. Lyte, Millersville, Pa., to succeed himself—term to expire in 1917.

James M. Greenwood, Kansas City, Mo., to succeed himself—term to expire in 1917.

Mrs. Estelle Reel Meyer, Toppenish, Wash., to succeed herself—term to expire n 1917.

A. J. Matthews, Tempe, Ariz., to succeed himself—term to expire in 1917.
Julius I. Foust, Greensboro, N.C., to succeed himself—term to expire in 1917.
W. T. Carrington, Springfield, Mo., to succeed himself—term to expire in 1917.
William P. Burris, Cincinnati, Ohio, to succeed himself—term to expire in 1917.

This report was, on motion, accepted and adopted as presented.

PRESIDENT PEARSE: The next item in the order of business is the consideration of invitations for places of meeting of the convention in 1912.

Invitations were then presented as follows: From the city of St. Paul, Minn., by S. L. Heeter, superintendent of schools of St. Paul; from the city of Chicago by Very Rev. Walter T. Sumner, of the Western Theological Seminary, Chicago; from the city of Nashville, Tenn., by Director J. J. Keyes, of Nashville. These invitations were presented in brief speeches setting forth the advantages of each city as a meeting-place for the next convention. After the presentations had been completed, Director James M. Greenwood moved that an informal ballot be taken, which ballot was duly ordered and resulted as follows: of 41 votes cast, the city of St. Paul received 31, and the city of Chicago received 10. On announcement of this informal ballot, Director Greenwood moved that the expression of preference indicated by the ballot be referred to the Executive Committee of the Association with power to act. This motion was duly seconded and carried.

A communication was received from the Department of Child Study requesting that the name of the department be changed to the Department of Child Hygiene. The communication was numerously signed by prominent members of the department. After discussion a motion prevailed authorizing the change of the name as requested in the communication.

President Winfield S. McKinney, of the Department of Business Education, presented the following resolution, which had been adopted on the previous day by the Department of Business Education, with an explanation that the Department desired this resolution to be placed in the hands of the Board of Directors with a view to having the matter considered later by the Committee on Investigations and Appropriations of the National Council; they were further explained by Sherwin Cody, Secretary of the Department of Business Education.

WHEREAS, The rapid development of commercial education thruout the United States and the world gives rise to many important problems as to the relation of the private business college to the commercial high school, the courses of study best suited to a broad commercial education, and the ways in which the highest success can be obtained in each individual branch of commercial teaching; and

WHEREAS, In the United States there is no governmental central authority to direct the course of education, especially commercial education, and this central work must necessarily devolve upon some national voluntary association such as the National Education Association, which means (as far as commercial education is concerned) the Department of Business Education of this Association; and

WHEREAS, We believe that this Department should enlist the interest of all commercial teachers thruout the United States, and the money they contribute as membership dues should largely be devoted to gathering and printing in authoritative form the best information as to courses and methods; therefore be it

Resolved, That the acting president shall appoint a committee of seven, which shall consist of the president, vice-president, and secretary, to be elected for the ensuing year, and four others appointed by the president, and with these shall be associated a committee containing a representative of each state in the Union, this Associate Committee to be chosen by the preceding Committee of Seven. It is further

Resolved, That this committee shall be considered permanent until its existence is abolished by vote at the regular annual meeting of the Department of Business Education of the National Education Association, tho its membership may be supplemented or changed at each annual meeting, as may seem best to the Department, and vacancies may be filled during the year by the president of the Department.

This committee is instructed:

1. To invite every commercial educator thruout the country to become a regular, permanent member of this Department;

2. To ask the Board of Directors or body of active members of the National Education Association to appropriate a certain sum for investigation, and permit the addition to this sum of all fees received in answer to the solicitation for new members;

3. To collect information as to the courses of study now being pursued in representative schools, both public and private, together with a clear statement of the reasons which determined each course;

4. To ascertain in what schools the highest success is being obtained in the teaching of each individual commercial subject, and to obtain from the teacher or director a clear statement of the reasons and methods thru which this success has been obtained; and

5. To report on the importance of having a special director for public-school commercial work, and if this director should be a teacher, or a business expert, or a teacher and a business expert consulting together, or if it is advisable to have the assistance at all of a business expert not experienced in teaching;

Or to carry out such part of this work as the committee finds itself able to accomplish, taking into consideration both the time of its members and the money that shall be at its disposal.

Director George H. Carpenter, of Brownwood, Texas, at this point tendered his resignation as a member of the Board, requesting that Felix E. Smith, superintendent of schools, San Angelo, Texas, be elected director to succeed him. On motion, the resignation of Director Carpenter was accepted and Felix E. Smith was elected as director for the state of Texas.

There being no further business, on motion of Director MacDonald, of Kansas, the meeting adjourned.

IRWIN SHEPARD, *Secretary*

Approved,

CARROLL G. PEARSE, *President*

MINUTES OF THE MEETINGS OF THE BOARD OF TRUSTEES OF THE NATIONAL EDUCATION ASSOCIATION AT THE FORTY-NINTH ANNUAL CONVENTION IN SAN FRANCISCO, CAL.

St. Francis Hotel
San Francisco, July 8, 1911

Pursuant to call, Trustees Young and Pearse met at the desk of the Secretary of the National Education Association, St. Francis Hotel parlor, floor M, at 12 o'clock noon, July 8, 1911. They were informed by Secretary Shepard that he had arranged for the Trustees to use the "Green Room," floor M, for their meeting, and they repaired to that room. They waited until 12:30, when inquiry from Secretary Shepard at his desk developed the fact that no other trustee had appeared to attend the meeting.

Fewer than a quorum being in attendance, the Trustees present adjourned to meet at the desk of the Secretary of the National Education Association as herein, at 9:30 A.M., on Friday, July 14, 1911.

C. G. Pearse, *Secretary pro tempore*

San Francisco, July 14, 1911

Pursuant to the above order, the Board met at the time and hour indicated. The Board immediately adjourned to meet at 10:45 P.M., July 14, 1911.

J. M. Greenwood, *Secretary*

St. Francis Hotel
San Francisco, July 14, 1911

The Board of Trustees of the National Education Association met at 10:45 P.M., July 14, 1911. Present, Trustees Pearse, Greenwood, Joyner, Brown, and Aley.

The first matter of business was the organization of the Board. Upon motion of Trustee Pearse, James M. Greenwood of Kansas City, Mo., was unanimously elected chairman for the current year. Upon motion of Trustee Brown, J. Y. Joyner of Raleigh, N.C., was unanimously elected vice-chairman for the current year. Upon motion of Trustee Joyner, Robert J. Aley of Orono, Me., was unanimously elected secretary for the current year.

The following resolution was presented by Trustee Joyner:

Whereas, Some doubt exists as to the legality of the action taken at the called meeting of the Trustees held in New York City on January 23, 1911,

Resolved, (1) That all actions taken at said meeting be and the same are hereby rescinded and repealed.

(2) That the action of the Secretary, Irwin Shepard, in employing his son, Elmer I. Shepard, as assistant secretary, without cost to the National Education Association, be and the same is hereby approved.

(3) That the investment of the surplus of the current funds of the Association by the Trustees during the year ending June 30, 1911, to become a part of the permanent fund be and the same is hereby approved.

Upon vote this resolution was unanimously adopted. It was voted unanimously that hereafter the minutes of all meetings of the Board of Trustees be printed in the Annual Proceedings of the National Education Association.

The following resolution was unanimously adopted:

Resolved, That all papers and records belonging to the Board of Trustees of the National Education Association, be transferred to the Secretary and by him kept in custody.

That Chairman Greenwood be instructed to inform ex-Chairman Nicholas Murray Butler of this action.

There being no further business to come before the Trustees, the meeting adjourned at 11:00 P.M.

ROBERT J. ALEY, *Secretary*

Attest:

J. M. GREENWOOD, *Chairman*

JOURNAL OF PROCEEDINGS

OF THE

FORTY-NINTH ANNUAL MEETING

OF THE

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES

SAN FRANCISCO, CAL., JULY 8–14, 1911

EDUCATIONAL SUNDAY

In accordance with a long-established custom of the Association, Sunday, July 9, was observed as Educational Sunday by a number of the churches in San Francisco. The pastors of these churches held special services with sermons and addresses on educational topics, as given following. All services were in the morning unless otherwise indicated.

"Honey and Enlightenment: A Study of Happiness as a Social Asset" (morning)—"The Earth and The Woman: In the First Century and the Twentieth" (evening)—Rev. Charles S. Aked, First Congregational Church.

"The Purpose of an Education" (morning)—"Religious Doubt, Its Cause and Cure" (evening)—Rev. Hugh K. Hamilton, California Street M.E. Church.

"The Great Teacher" (morning)—"How Knoweth This Man Letters" (evening)—Rev. W. H. Bagley, West Side Christian Church.

"Real Education Leads Godward" (morning)—"The Incomparable Teacher" (evening)—Rev. Louis J. Sawyer, Hamilton Square Baptist Church.

"The Teacher and Society"—Rabbi Martin A. Meyer, Temple Emanuel. Services on Saturday, July 8.

"Ethical Ideals in Modern Educational Theories"—Rev. Bernard Kaplan, Congregation Beth Israel. Services on Saturday, July 8.

"Religion and Education"—Rev. Charles Lathrop, Church of Advent, Episcopal.

"The Teacher's Calling" (morning)—"Education for Character "(evening)—Rev. George E. Burlingame, First Baptist Church.

"The Bible Supreme as an Educational Force" (evening)—Rev. George W. Rine, Seventh Day Adventist Church.

"Education a Factor in National Life"—Rev. J. Fuendeling, St. Markus Kirche.

"The Place and Scope of Education in Religious Life" (Swedish language used)—Rev. Alfred E. Lindberg, First Swedish Baptist Church.

"Our Master's Model Mind"—Rev. James McElhinnery, Holly Park Presbyterian Church.

"The Place of Knowledge in the Christian System"—Rev. Robert Irwin, University Mound Presbyterian Church.

"Public School: Its Influence on the Republic"—Rev. Dr. M. S. Levy, Geary Street Temple. Services on Saturday, July 8.

"The Religious Elements in Education"—Rev. William P. Sullivan, St. Mary's Cathedral, Catholic.

"The Ideal Woman"—Swami Trigunatita, Hindu Temple, 2963 Webster Street.

"Religion and Public Education"—Rev. E. R. Dille, Central Methodist Episcopal Church.

"Present-Day Tendencies in Education"—Rev. R. Logan, Lebanon Presbyterian Church.

"Religious Education in the Public Schools"—Rev. C. S. Tanner, Richmond Presbyterian Church, 31st Avenue and Clement Street.

"Religion Cannot Be Taught But Must Be Cherished" (morning)—"Education Without Religion Dangerous" (evening)—Rev. W. K. Guthrie, First Presbyterian Church.

"Personal Education"—Rev. F. M. Larkin, Ph.D., of Los Angeles, Grace M.E. Church, 21st and Capp Streets.

"What Are We to Do with the Bible?" (morning)—"Marriage and Divorce" (evening)—Rev. John Jackson, Hamilton Methodist Church.

"The Law of Health and Happiness"—Christian Science Reformed Church.

"The Divine Glory of the Commonplace" (morning)—"Education and Revelation" (evening)—Alfred Brown Penniman, preacher; Rev. Robert Wells Rogers, pastor.

"The Bible and the Public Schools" (evening)—Rev. R. M. Davis, Westminster Presbyterian Church.

"A Proper Education Is one Equally Developed, Physically, Morally, and Spiritually" (morning)—"The Worth of the Man" (vesper service, 5 o'clock)—Rev. Dr. Fletcher Cook (Very Rev. Walter J. Gresham, Dean).

"Peace"—President David Starr Jordan, First Congregational Church, Oakland.

Visiting teachers were invited to Trinity Episcopal Church by Rev. T. W. Clampett. Very Rev. W. T. Sumner, dean of the Cathedral in Chicago, preached in the morning.

Calvary Presbyterian Church—Rev. William Rader, pastor. Dr. E. C. Ray, of Pasadena, preached.

FIRST DAY'S PROCEEDINGS

Opening Session—Monday Afternoon, July 10, 3:30 o'clock

The Forty-ninth Annual Convention of the National Education Association was opened in the Greek Theatre at Berkeley, Cal., at 3:30 p.m. on July 10. William B. Pringle, chairman of the California organization for the San Francisco convention of the National Education Association, presided at the opening of this session.

The music at this session and all other general sessions was furnished by Williams' Concert Band, under the direction of Mr. Ernest G. Williams. A musical program preceded the session, beginning at 2:30 o'clock.

Rev. William Kirk Guthrie of the First Presbyterian Church, San Francisco, led the audience in an opening prayer.

Chairman Pringle then introduced the following, who delivered addresses of welcome: Hon. Hiram W. Johnson, governor of California; Hon. P. H. McCarthy, mayor of the city and county of San Francisco; President Benjamin Ide Wheeler of the University of California; and R. B. Hale, Esq., director of the Panama-Pacific International Exposition Company.

Following the addresses of welcome Chairman Pringle introduced to the audience Dr. Josiah Little Pickard, of Cupertino, Cal., who was president of the National Education Association for the year 1871 and was superintendent of schools in Chicago at the time that President Ella Flagg Young began service as a teacher in that city. Chairman Pringle transferred to Dr. Pickard the privilege of introducing to the audience the President of the National Education Association, Dr. Ella Flagg Young, of Chicago, Ill.

The remarks of Mr. Pickard and the response of President Young will be found in the text of the welcoming speeches and responses.

President Young then introduced Robert J. Aley, president of the University of Maine, to respond to the address of welcome in behalf of the members of the National Education Association.

At this point President Young announced the Committee on Resolutions appointed to present a Declaration of Principles and other resolutions to the meeting of active members on Thursday noon, July 13. The members of the committee are as follows:

COMMITTEE ON RESOLUTIONS

Carroll G. Pearse, of Wisconsin, *Chairman*

James B. Aswell, of Louisiana
James W. Crabtree, of Nebraska
John H. Phillips, of Alabama
Mrs. O. Shepard Barnum, of California
Maximilian P. E. Groszmann, of New Jersey
Gertrude E. English, of Illinois

Following this announcement an address was given by President David Starr Jordan of Leland Stanford Junior University, on the subject "Temperance and Society."

The last speaker of the session was Mrs. Helen Marsh Wixson, state superintendent of public instruction, Denver, Colo., who delivered an address on "The Cause of Education."

By previous arrangement and announcement the sessions of the active members by states for the election of members of the nominating committee were held immediately after the close of the exercises in the Greek Theatre at designated sections of the theatre.

The convention adjourned to Tuesday evening, July 11.

SECOND DAY'S PROCEEDINGS

SECOND SESSION—TUESDAY EVENING, JULY 11, 8 O'CLOCK

The convention was called to order in Pavilion Rink in the city of San Francisco by President Young at 8:00 P.M.

Music by the Williams Concert Band under the direction of Mr. Ernest G. Williams.

Rev. E. B. Dille, Central Methodist Episcopal Church, San Francisco, opened the exercises with prayer.

The annual presidential address was delivered by Ella Flagg Young, superintendent of schools, Chicago, Ill., on the subject, "Hypothesis in Education."

This was followed by "An Appreciation" by Alfred Roncovieri, superintendent of schools, San Francisco.

After music by Williams' Concert Band, James H. Baker, president of the University of Colorado, Boulder, Colo., gave an address on "Reorganization of American Education."

The convention was then adjourned to Wednesday evening, July 12.

THIRD DAY'S PROCEEDINGS

THIRD SESSION—WEDNESDAY EVENING, JULY 12, 8 O'CLOCK

The convention assembled at 8 o'clock P.M. and was called to order by President Young. Music by Williams' Concert Band.

The invocation was given by Rev. Charles M. Lathrop, Church of Advent, San Francisco.

President Young then announced the following Committee on Nominations:

COMMITTEE ON NOMINATIONS

James Y. Joyner, of North Carolina, *Chairman*

JOHN H. PHILLIPS.....Alabama
C. F. PHILBROOK.....Arizona
ERNEST BERRY.....Arkansas
HUGH J. BALDWIN.....California
ANNA L. FORCE.....Colorado
L. ANGIE STANTON.....Connecticut
(No appointment).....Delaware
HARLAN UPDEGRAFF.....Dist. of Col.
CLEM HAMPTON.....Florida
(No appointment).....Georgia
GRACE M. SHEPHERD....Idaho
WILLIAM B. OWEN.....Illinois

Charles H. Dodson	Indiana
B. J. Horchem	Iowa
E. T. Fairchild	Kansas
W. P. King	Kentucky
T. H. Harris	Louisiana
J. L. McConaughey	Maine
M. Bates Stephens	Maryland
Schuyler Herron	Massachusetts
L. L. Wright	Michigan
J. C. Bryant	Minnesota
E. L. Bailey	Mississippi
F. D. Tharpe	Missouri
J. H. Underwood	Montana
James W. Crabtree	Nebraska
B. D. Billinghurst	Nevada
Perley E. Graffam	New Hampshire
M. P. E. Groszmann	New Jersey
Rupert F. Asplund	New Mexico
George M. Forbes	New York
James Y. Joyner	North Carolina
(No appointment)	North Dakota
John W. Zeller	Ohio
W. A. Brandenburg	Oklahoma
E. D. Ressler	Oregon
Samuel Andrews	Pennsylvania
Helen C. Putnam	Rhode Island
Alice M. Moudy	South Carolina
C. G. Lawrence	South Dakota
W. C. Anderson	Tennessee
George H. Carpenter	Texas
D. H. Christensen	Utah
Carrie White	Vermont
L. A. Robinson	Virginia
Henry B. Dewey	Washington
Robert A. Armstrong	West Virginia
Emma Gardner	Wisconsin
Ira B. Fee	Wyoming
Isaac M. Cox	Hawaii
G. N. Anderson	Phil. Islands

The first address of this session was "The Opportunity of the Teacher," by Mrs. Emmons Blaine, Chicago, Ill.

This was followed by "The Development of Personality Thru Education," by Margaret E. Schallenberger, principal of the Training Department, State Normal School, San Jose, Cal.

After music by Williams' Concert Band, Joseph Scott, president of the Board of Education of Los Angeles, Cal., gave an address on "The Compensation of the Teacher."

The program ended with an address by Charles Zueblin, of Boston, Mass., on "The Life of the Teacher."

The convention then adjourned to Thursday evening, July 13.

FOURTH DAY'S PROCEEDINGS

Fourth Session—Thursday Evening, July 13, 8 o'clock

The convention was called to order at 8 o'clock P.M. by President Young. Music by Williams' Concert Band.

The meeting was opened with an invocation by Rev. George E. Burlingame, First Baptist Church, San Francisco.

The first paper was by Samuel Avery, chancellor of the University of Nebraska, Lincoln, Nebr., and was entitled, "Can We Shorten the Term of Years Without Decreasing the Efficiency of Education in American Schools?"

This was followed by music by Williams' Concert Band, after which the second address was presented. This was "Present Problems in English Education," by Kate Stevens, North Islington Central School, Tollington Park, London, England.

The session adjourned to Friday evening, July 14.

FIFTH DAY'S PROCEEDINGS

Fifth Session—Friday Evening, July 14, 8 o'clock

The meeting was called to order at 8 o'clock P.M. by President Young. Music by Williams' Concert Band.

The invocation was given by Rev. Charles A. Ram, secretary to his Grace, the Archbishop Riordan, San Francisco.

Katherine D. Blake, principal of Public School No. 6, New York, N.Y., read a paper on "Peace in the School."

"Progress in Public Education" was the title of an address by Francis G. Blair, state superintendent of public instruction, Springfield, Ill.

This was followed by music by Williams' Concert Band.

President Young then introduced the president-elect, Carroll G. Pearse of Milwaukee, Wis., who replied to the introduction as follows:

The call of opportunity is the call of duty. The burden is laid upon us, who for the time are placed in official position, to make this Association, so far as in us lies, worthy of its past and of its possibilities; to make its influence felt to the betterment of every department and line of endeavor in the schools of America.

Any president of the National Education Association needs the counsel and co-operation of every one of its members; in a multitude of counselors there is wisdom. In the discharge of my duties for the year I desire and shall ask the suggestions and help of the leading educational people of the nation, those whose duties lie without, as well as those who labor within schoolroom walls; of every operative teacher in whatever department of school work employed; of citizens, the fathers and mothers of the young people who fill our schools. United, we can do much.

I appreciate the honor the members of this association have conferred upon me. Nothing I can do to advance the interests of the Association shall be left undone.

Permit me, Madam President, to return to you this symbol of your authority, in order that you may close in fitting manner the meetings of this Convention, which you have so effectively organized, and over which you have so well presided.

President Young then declared the Forty-Ninth Annual Convention of the National Education Association adjourned *sine die*.

IRWIN SHEPARD, *Secretary*

GENERAL SESSIONS OF THE ASSOCIATION

ADDRESSES OF WELCOME

I. HIRAM W. JOHNSON, GOVERNOR OF THE STATE OF CALIFORNIA

Members of the National Education Association:

Mingled with our love of the state of California and our pride in its grandeur is the desire to share its beauties and advantages. We welcome all who come, not only those who come as the representatives of a certain profession but all those whose influence tends to uplift our standard of citizenship. Therefore we extend to you hearty and heartfelt greetings.

You are of two classes. The first class is made up of those who follow your calling simply because it is a calling, and the second is made up of those who have entered it with the zeal of the crusader and are working for all that makes for progress intellectually, and that means progress, socially and politically.

It is in the payment of the debt we owe you that we extend our welcome to you who come here, and we hope that your stay may be prolonged. May we always look to you for aid and consolation along the lines in which you have been a help to us. California welcomes you; may you remain long with us and when you depart come yet again.

II. P. H. McCARTHY, MAYOR OF THE CITY AND COUNTY OF SAN FRANCISCO

Ladies and Gentlemen:

The length and breadth of California greets you today. Under these sunny skies, surrounded by the famed and historic hills of Berkeley, the educational center of which we are so proud, it is my pleasant privilege as the mayor of San Francisco to welcome you in behalf of that great metropolis just across the water, and, figuratively, to place in your hands the golden key which unlocks the gates of our city, our most coveted treasures, and our hearts. Thrice welcome to the members of the National Education Association.

There is one great theme and problem in which we find all elements of citizenship and society interested, and that is the great subject of education. It is conceded that the march of education is the march of civilization, and those of us who delight in the lessons of our world's history well understand the fact that education has carried the world upward and forward, conquering the savagery that arose from universal ignorance, and bringing peace, comfort, and happiness to a world that was once devoid of such blessings. Even as Christianity has forged ahead in its everlasting

crusade for right, truth, and justice, making the world better and cleaner wherever its teachings have penetrated, so has the cause of education, public and private, elevated nations, enlightened the masses and classes, and bestowed peace and glory where turmoil and suffering once prevailed.

It is true that the romance of far California, with her gold-ribbed mountains, her fruit-laden valleys, and her splendid forests and magnificent waterways, has attracted you all, in a physical sense, to this section. But it is also true that you come here on a mission which in its supreme importance would take you to Cuba, Alaska, the Sandwich Islands, or elsewhere, even as it has brought you to the Pacific Coast. For wherever the American flag waves today the blessings of a systematic education are to be found in a greater or less degree, and by that sign we know that we shall survive as a nation that cannot perish from the earth.

For my part, as one who springs from the ranks of the toiler and who, as a member of the generation just going ahead, was not so fortunate as to enjoy the advantages of a public education now provided for our rising generation, I am deeply interested in the great cause of a technical and practical education which shall parallel the splendid system of learning you now have in vogue. I am a firm believer, and I reflect the sentiment of my people, in the value and wisdom of the education furnished a certain percentage of our children in our polytechnic schools today. Realizing the merit and efficiency of your average course of study as laid down for the primary, grammar, and high schools today, replete as they are with their special subjects, I nevertheless believe our future as a nation would be further and better assured had we more of the technical education that is today applied in our schools where manual training and the useful arts and crafts are taught, and where young men and women combine with the common book learning the advantage of learning a trade or calling, assuring them independence and a means of livelihood and support. The toiling masses fully appreciate what you have done for them, and they respectfully ask that you consider a further indulgence of that practical branch of education which equips young men and women to make their own way in the world, and which advances the cause of science and the practical arts and crafts.

As we are uplifted and sustained by the improvements in our methods and means of administering a proper public and private education, we naturally come close together with a better understanding of our needs and wants and more emphatic sympathy for each other as well. All of this tends to strengthen the nation and make her people the more invincible. Education teaches peace and progress, and under such circumstances we have no time for strife and unhappiness. The great and mighty element that controls wealth and money power is as susceptible to the benefits of your propaganda for education as the man, who thru his toil and grim endeavors, creates with his hand the productive conditions

of industrialism and makes wealth possible. The toiler depends upon education for progress and development, and so does every other class if, indeed, that class hopes to survive.

A nation without battleships, but with an enlightened people, is well fortified and need entertain no fear, for the blessings and advantages that accrue from a great common education easily take care of such minor considerations as a means of physical defense. Give us our institutions for practical learning, as we are inevitably welded together, the masters of science, philosophy, and the art of government, and we are strong beyond all comprehension.

Again I extend to you San Francisco's heartiest welcome. Come within our gates and there abide. We appreciate your presence and will make it our successful endeavor to demonstrate that fact to you while you are among us.

I thank you.

III. BENJAMIN IDE WHEELER. PRESIDENT, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

The American public school confronts today an utterly different task from that implied in the purposes which first gave it birth. It was called into being to serve the uses of a reasonably homogeneous people—homogeneous in language and traditions—under a strong predominance of Anglo-Saxon blood and spirit. The sources of Anglo-Saxon immigration have long since been choked and the Anglo-Saxon stock in the new world becomes less and less productive with the years. It is a dying and vanishing race. Within the last decade the scale has abruptly tipped, in the count of population, from the old inhabitant to the newcomer. In our chief American city scarcely one in ten is old American, and even in old New Haven but one child in five in the public schools is of native parentage. In Boston the balance has already shifted from the Puritan to the newcomer. The old United States as it existed before the Civil War is hurrying off the scene, and a new people mixed of many European bloods, most of which had little or no share in the original occupation, is coming to possess the land, and give inevitably a new meaning to the name American—a new meaning inevitably, so far as it refers to blood and bone and even to type and temperament, but what of ideas and ideals? Can or cannot the precious heritage of social liberty and equal opportunity which long struggle and sacrifice have associated with the word Americanism be safely transferred along with the name from the old possessors to the new? The time is short, the inheritors are legion, the possession vanishes from the hand of him who understandeth not, like a tender perfume from the unsealed jar.

Whether the transfer can be made, that is the new problem which confronts us as a people; and the solution of this problem constitutes the new task which the unfoldings of these later years have revealed and assigned

to the American public school. The splendid institutions of enlightenment —schools, libraries, museums, institutes of art and instruction, which the sons of the Boston Puritans created for themselves and their children, have already been assigned—by a power that knew better why they builded than they themselves knew—to the task of assimilating into the American community the children of those whom Europe neglected and oppressed. Such too may well be the destiny of that whole system of institutions shaped to the betterment of society with which the old Americans as forerunners endowed this land. They may be a vanishing race, but if an estate which they, beyond the ordinary measure of men, were potent to create shall have served for the betterment of mankind in the hands even of heirs by adoption, they will have done their work and justified their existence. This is no new thing in the ways of the world and the fates of the races of man. The Myceneans inspired in the later-coming Greeks the zeal for building and art, and the Etruscans laid foundations upon which the Latins learned to build the Eternal City by which in the process of the years wave after wave of invading barbarism has been absorbed into civilization.

The most potent instrument by which the school operates to mold the diverse elements of population into a people capable of nationality is the maintenance of a common standard of speech. Difference of race loses, in the presence of unity of speech, its divisive power. Nationality all over the world tends more and more to shape itself on social intercourse as determined by language. The power to make oral use of the English tongue simply, directly, exactly, is a fundamental equipment for good citizenship and effective living. The establishment of this use thruout the nation is a fundamental guaranty of that uniformity of intercourse among its citizens which provides a basis for the permanent commonwealth. It is the plain and correct use of language that we ask the schools to teach and not to neglect it in the pursuit of the artificialities of rhetoric and the æsthetics of literature.

American does not mean Anglo-Saxon, nor is it at all a word of race. We are a nation by virtue of our common speech, and more than that, by virtue of certain instincts, faiths, and predilections which we group under the term Americanism, and these are some of them: to judge men as individuals and not as members of a class or by the possession of goods; to abhor fixed and wooden standards in the judgment of flesh and blood and to try to see things as the other fellow sees them; to shift often the perspective lest little things gain bigness by being too near the eye; to resent the exaction of the uttermost farthing; to count on human brotherhood despite the race lines; to be interested in everything human; to be hospitable toward innovation and change; to have constant faith in betterment and belief that all which lives improves; to trust many things to right themselves; to have more confidence in the law that is within than

in the exercise of force; to allow a man free opportunity for unfolding his life; and to give all men of whatever class or wealth equal standing before the law. We are ludicrous optimists; we tolerate all sorts of laxities; we are humbugged and deluded; we suffer from lack of training; we waste our materials fearfully: but we are charitable toward the diversities of human character and equipment, and with all our losses prefer to give men their freedom rather than make them machines.

This is Americanism. It is the religion of a land where all the races of Europe are mingling their bloods and tempers to bring into being the new occidental man and set him to face the man of the East. And here today, where half the world looks out thru its farthermost gate toward the other world-half, that power which has in its hands the fate of the peoples has assembled and seated itself in council—the American public school.

IV. R. B. HALE, VICE-PRESIDENT OF THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION COMPANY

Members of the National Education Association:

On behalf of the president and board of directors of the Panama-Pacific International Exposition Company, and the people of the West, I am pleased to say a word of welcome to the members of the National Education Association.

Our work in promoting an exposition, in a sense, supplements the efforts of our educators. While you carry forward a great comprehensive plan on a national scale, our work is international in scope. We are bringing within the borders of the United States examples of the world's achievements in art, science, and invention, ancient and modern, that they may be compared side by side and explained in an intelligent manner to all seekers after knowledge.

From the time of the first great fair in London, in 1851, down to the present, expositions have advanced along progressive lines until today they have become scientific. Experts have been developed in every branch of exposition building. Foreign governments have come to recognize the advantages derived from really great expositions, and are specializing in their efforts to attract the world's attention. The Far East is also awakening along these lines, as is evidenced by Japan's determination to hold a world's exposition in 1917.

The modern exposition exemplifies the secret of the true scholar. "Every man is my master in some point, and in that I learn of him." The people of every nation do some one thing better than the people of any other nation. Each has its own peculiarities; each excels in something. All coming together, displaying their arts and wares in one city, will afford a wonderful opportunity for educational advantages. This in itself will justify all the exposition will cost in time and effort. Never in recorded

history has the world made such material progress as during the last few years. Doctor Peabody has well said:

A world's fair is an epitome of the world's progress; a history and a prophecy. The latest discoveries, the newest inventions, the triumphs in art, in science, in education, in the solution of social and even religious problems, are here arrayed. Here stand the most effective dynamo; the swiftest locomotive; the telescope piercing the remotest heavens; the most productive printing press: the most destructive artillery; machines that spin, weave, set type, thresh grain, mine coal, drill rock, fashion railway cars; the artist's dream on canvas or in marble, in clustering column or aspiring dome, in woven fabric or decorated vase; the flower's effulgence or the fruit's alluring blush; all products of the soil, the mine, the sea; whatever testifies to the industry, the skill, the creative and almost divine power of human thought when stimulated to its most earnest endeavors. Thus, at each latest exposition doth Mother Earth make a new inventory of her acquisitions. Thus does she erect at each station in her march toward the stars a monument inscribed with a record of her victories.

RESPONSE TO ADDRESSES OF WELCOME

ROBERT J. ALEY, PRESIDENT, UNIVERSITY OF MAINE, ORONO, ME.

Madam President, Governor Johnson, Mayor McCarthy, President Wheeler' Ladies and Gentlemen:

I esteem it a very great honor to respond to the welcome so generously given. The welcome itself has the true and genuine ring of the West. I am glad to respond to it, because I believe you mean it.

Personally, I represent the most eastern higher institution of learning in the United States. Officially, I speak in the name of half a million teachers scattered from Eastport to Cape Mendocino and from Portal to Key West. I speak, also, in behalf of 18,500,000 school children who daily gather for instruction in 262,000 school buildings. I speak in behalf of a body of men and women who receive annually $220,000,000 in salary, an amount nearly $65,000,000 in excess of that paid for pensions and $14,000,000 short of that required to maintain our army and navy upon a peace basis. I speak, therefore, for a most important constituency.

No city or state has ever entertained a convention which will reach in a direct way so many people. Every teacher in the land is here in spirit. Every one of them will know something of our deliberations. There is not a child in any school in America but what will be touched in some way by the results of these meetings. Thru the children the influence of this meeting will reach every home in the land. In view of these things, your state and city welcome a body of men and women who have the destiny of the Republic in their control.

I am most proud to receive your words of welcome, because they are given to a great institution—the school. When the first settlers came to America they were not slow to organize a town meeting, build a church, and open a school. In the first of these institutions there have been many

disputes and some failures, in the second many schisms and heart-breaking controversies, but in the third, the school, there has been widespread interest and general agreement. To it the people have been loyal in theory and practice. For it they have sacrificed much, and upon it they have spent freely their money. The school is a great common institution and is essential to the welfare, even to the perpetuity of the Republic. A monarchy may get on with an ignorant citizenship, but in a Republic where every man is a king and every woman a queen, all must know.

The success of our government in its municipal, state, and federal activities bears high testimony to the intelligence of our citizenship.

The school preserves the common knowledge which civilization has found necessary and useful, and passes it on to the succeeding generation. The school utilizes the new additions to human knowledge and prepares them for instruction. The school, by its organization, its system, its requirements in punctuality and order, trains the youth of the land in these most essential virtues. The school is the greatest moral force at work among our people.

So long as one is dissatisfied with his achievements and present position, there is hope for him. One of the greatest functions of the school is to fill youth with a holy unrest. The school turns back the cover of knowledge and causes it to challenge the beholder. It gives a glimpse of the unknown and urges exploration. It was unrest and dissatisfaction that brought the Argonauts across the desert and around the Horn to this land of golden opportunities. The school that performs its duty well makes Argonauts of the boys and girls who enjoy its privileges.

The great developments and scientific achievements of recent years depend upon obedience to law. The making of a needle or a battleship depends at every step upon strict obedience to law. If the law of the needle or the battleship is violated in any part of the process, the result is a poor needle or a worthless battleship. The growing of the prize ear of corn is in obedience to law. If you do not believe this, ask Clore, the corn king of America, who has spent twenty-five years in ascertaining corn law. The school is doing great work today in bringing the children of America to an appreciation of law as the most fundamental thing in life. Where it succeeds in establishing faith in law and a consuming desire to know law and obey it, its product goes out to bless and to serve.

In conclusion, let me assure you that the teachers of this Republic, the children, who are its future hope, and the school itself—the greatest institution we have—accept with pleasure the welcome so generously given.

INTRODUCTION OF PRESIDENT YOUNG

JOSIAH L. PICKARD, CUPERTINO, CAL.

Mr. Chairman, Ladies and Gentlemen:

As I have looked out upon this vast audience, my thoughts have flitted back and forth over a period of fifty-three years of my connection with this Association, back to a small room in Cincinnati which sufficed for the few gathered for deliberation upon the education of a nation, at the first regular Annual Convention of this Association. Not one do I meet here today.

"O for the touch of a vanished hand,
And the sound of a voice that is still!"

Here, in one of God's first temples, whose inclosing walls are high mountains and a vast ocean, and whose roof is the blue vault of heaven, are gathered thousands of worshipers.

The occasion bids me think of the city which is today honored for the fifth time by the call of its superintendent of schools to the presidency of this National Association and this time, the first in its history, a woman —a woman who at the beginning of her career took for her motto: "Life attains its highest eminence not by sitting idle upon past achievements but by steadily pressing onward and upward." Beginning her work as a teacher in the city where she found salary attached to position and not to person, she enters the line for promotion in position opened to all without distinction of sex and to be filled on the basis of merit. She devotes her evenings to study, that she may be fitted to any position open to her desire. Step by step she advances with both men and women at her side, until the last step but one is reached—that of superintendent of a district —where she is one of ten equally divided as to sex. Here in her work she finds a disposition on the part of those in authority to require the placing of a hobble-skirt upon her freedom to do what she feels best for the schools under her charge. So she steps out of the line of promotion into a professorship in the University of Chicago, whose diploma she bears and from which she received the honor of the degree of Doctor of Philosophy, which she had earned by her long-continued course of study. Not long does she remain in this position but is called to the presidency of the city Normal Teachers College. Now she returns to the chosen line of promotion and by advice of friends becomes a candidate for the superintendency of the Chicago city schools. Winning over a number of men of prominence, she today is the leader of a body of six thousand teachers, many of whom have been under her instruction and nearly all under her influence. *Luck* —do I hear? No, my friends—luck is a headless word and offensive. *Pluck* is emblazoned on her banner and with pluck in her heart, ignoring privilege and conquering disability, she has won in her career entirely within the limits of a single city.

And now it is to me an occasion of peculiar pleasure that I meet one whose work it was my privilege to observe for thirteen years and speak with her of the city whose destruction and rebuilding we both witnessed; and it is with enhanced pleasure that we meet in a sister city of like experience. Purified by fire, your city has risen into newness of life thru her indomitable energy—why waste breath upon long words, when a single syllable suffices—thru the *pluck* of her men and women.

Members of the National Education Association, it is with pardonable pride that I introduce to you as your president one who has won honor in every station she has held,

Doctor Ella Flagg Young,

and now, Mr. Chairman, she awaits at your hands the crown of national honor.

PAPERS AND DISCUSSIONS

TEMPERANCE AND SOCIETY

DAVID STARR JORDAN, PRESIDENT, LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

We may look at the alcohol question from three different points of view —its physiological effects on the human body, the effect of its public sale, dilute or concentrated, on society, and its effect on the character and purpose of the individual man.

Alcohol is a substance or drug produced in the disintegration of sugar by certain minute plants or ferments. In wines or malt liquors, the amount of alcohol is relatively small, mostly from 3 to 10 per cent. In distilled liquors there may be from 40 to 80 per cent of alcohol. Whether dilute or concentrated, alcohol has the same general effects, the degrees dependent mainly on the amount of the substance absorbed into the system.

The general action of alcohol is that of a nerve-depressant. It appears as a stimulant only because its first effect in lowering nerve-action is to dissolve those restraints and reserves which we naturally build up in our experience in life. The formation of the restraints and reserves is known as character-building.

To throw off restraint gives an appearance of stimulation, because it releases the lower tendencies otherwise held in check. A man under the influence of liquor may utter his most profound secrets. To do this freely is not an evidence of intellectual strength or of mental activity.

To cut off the head of a chicken will in the same fashion impel the bird to violent motor activity. But we do not call the process a "stimulant," for the activity thus produced is temporary and to no purpose.

The effect of alcohol as a depressant is the same in kind, whether the quantity taken be large or small. The difference between the glow of a glass of claret and the stupor of a whiskey debauch is mainly one of degree.

Alcohol again has a specific effect on the nervous system as a disturber of accuracy. In this lies the joy of wine such as it is. It has a certain power "to drive dull care away," to erase "from the sad calendar unborn tomorrow and dead yesterday." It has the power of causing the nervous system to lie, to make one feel warm when he is cold, to make one feel good when he is not good, and by the same whim to bring about "a difference in the morning," a dark-brown taste, a subjective wretchedness which is as unreal as the supposed joy which it inevitably follows.

The nervous system once taught to lie fails afterward to record the truth. This failure affects the three great mental processes alike—sensation, comparison, and movement: observation, thought, and action. It makes its victim uncertain as to what he sees or feels, hazy as to the meaning of his sensations, and shaky when he carries his feeling or thought into action. Repeated saturation of the nervous system makes these difficulties chronic, and the fact is recorded by the fall of the victim in the respect of others. With this goes the more important loss of his own self-respect. The evil in this case is not primarily drunkenness, but nervous deterioration. Drunkenness is a spasm of the nervous system. In a sense, it is an effort of nature to throw off the evil. When alcohol ceases to make a man drunk, he is in a pretty bad way. He has lost his sensitiveness and is as little a normal man as if he were insensible to a hot iron or to contact with an icicle.

This is the fallacy inherent in the claim that the wine-drinking countries are the models of temperance. The daily semi-saturation of the Italian laborer may be just as unwholesome as the occasional sprees of the Scottish farmer. The latter may be more unpleasant when in his cups, but he may likewise be more normal in the longer intervals between them. The statistics of Jean de Bloch show a higher percentage of deaths from alcoholism in France than in England, tho England would doubtless show a larger visible percentage of drunkenness. Besides, it is the countries of moderate drinking in which there is the greatest consumption of absinthe, and other alcoholic poisons, in which the drug appears in its most virulent form.

The truth is that while dilute alcohol is less harmful than alcohol not diluted, there is no amount of alcohol that has not its evil effect on the nerve-structures of the body and therefore on the veracity of life. It is, moreover, a feature of the alcohol habit that it tends to grow with indulgence. The inebriate begins as a moderate drinker, tho in most cases the moderate drinker does not become an inebriate. But every man who treats his nerves to alcohol suffers from the experience in greater or less degree.

It is doubtless true that many alcoholic drinks, notably whiskies, have been recklessly adulterated or that they may contain fusil oil or other

poisonous volatile oils besides alcohol. But chemists who have analyzed these beverages say that none of these poisons are more virulent than the alcohol itself. The great pharmacologist of London, Dr. Cushny, tells us that if alcohol were a new discovery, a synthetic drug from some German laboratory, its use in any form would be prohibited by law, as has been the case with the much more valuable drug cocaine. Besides its effect on the brain and nervous system, on the mind, sensation and motion, the functions of this system, we have alcohol as a general disturber of the processes of the body.

Most of these are modified somewhat, always for the worse, but the burdens on the kidneys, the liver, and the arteries may be especially noted. The worn-out kidney appears as Bright's disease, the disintegrated liver as cirrhosis, and the stiffened arteries as sclerosis, which means premature old age. Quite as important is the effect recently emphasized by Dr. Metschnikoff on the phagocytes of the blood. The phagocytes, or germ-destroying corpuscles, in the blood constitute our chief protection against infectious diseases. The little plants which produce typhoid fever, tuberculosis, pneumonia, blood-poisoning may find their way into the blood, to be devoured by the phagocytes, leaving us no record of their existence.

By alcohol these minute creatures are themselves destroyed, and the drinker, even in the most gentlemanly moderation, is more likely to fall before a bacterial infection than is a total abstainer.

And with all this, the abstainer has the advantage of knowing that his pleasures are real, his joy strengthens his body and spirit and makes way for more happiness. For this is the test by which happiness is known. False pleasures, having their source in drugs, joys which burn, also burn out, destroying the future possibility of joy. It was a poet once convivial who gave us the story of the *City of Dreadful Night*, and of the "time that crawleth like a monstrous snake, wounded and slow and very venomous."

In an attack on alcohol as a beverage, it is now the physician and the physiologist who take the lead. It is admitted that a small amount of alcohol may be decomposed or digested by the gastric juice. To this degree and to this degree only, alcohol is a food. But all taken in excess of this food value is of the nature of poison. Whether alcohol is always a poison depends on your definition of poison. Any poison may be taken safely in quantities so small that the tissues can resist it. Strychnine, in minute quantities, is largely used as "tonic." In fact, most so-called tonics consist of atoms of poison used to stimulate motor activity. If strychnine is always a poison, then alcohol is also. If strychnine tonics are excepted from this definition, we may except dilute alcohol in small quantities, by the same process of reasoning.

If the use of alcohol were a personal matter, its effects beginning and ending with the individual, the plea of personal liberty might be effective in letting each man decide on his own relation to it.

But the sale of alcohol has its public relations. If the operations of an inebriate or even those of a moderate drinker are so conducted as to endanger others, the whole matter becomes a concern of the public.

A drunken man is everywhere a social nuisance. Under most circumstances he is a source of bodily danger to his family and to the public at large.

In all lands drinking-places are sources of danger. They lead children to drink. They make drunkards. They are the potent direct cause of the spread of poverty, crime, disease, feeblemindedness, and insanity.

This is true of such places the world over—the wine-rooms of Italy, Spain, and France as well as of the vodka-shops of Russia, the rum-holes of London, or the dives of New York. It was true of the state-regulated, orderly centers of evil under the respectable, Goteborg system of Sweden, as well as of the lidless resorts of the region "somewhere East of Suez, where the best is like the worst."

Thus far, nobody has devised a permanently decent method of selling alcohol as a beverage. The German *Biergarten* perhaps comes the nearest to this orderly ideal; but the *Biergarten* is recognized as the source of ruin of thousands of young men and the temperance question is becoming as acute in some of the universities of Germany as it ought to be in those of the United States.

The wine-shops of southern Europe do not improve on acquaintance, and the dignified officialism of the Swedish system is failing because drink makes drunkards however honestly the process may be carried on.

There is plenty of exaggerated statement on both sides, so far as the influence of the lighter alcoholics is concerned. I believe that the weight of testimony is against them all, and the man who avoids them certainly does not feel that he has missed anything of value; but many good men—many of the best of men—take a contrary view, and this is not the primary question at issue.

"The fact that a glass of beer heightens the pleasure of eating constitutes a most important point in its favor." I do not myself find it so, but I fully admit this argument as one of value, and I admit also that its value is one each man must settle for himself.

I repudiate wholly the idea that unless our emotions are artificially pumped up by alcohol they will be subject to atrophy. In the normal man, emotions should depend on adequate objective causes. Subjective emotions wear out the nervous system. In the words of Annie Payson Call, "Sham emotions torture, whether they be of love, religion, or liquor." A sham emotion, or subjective emotion, is one cherished for its own sake, with no purpose that it shall ever be translated into action.

It is soberly claimed that the opium traffic is necessary for the welfare of China. Without his pipe-dream, the average Chinaman would never know joy. But it is never well for any man to think that he is having a

good time when he is not. The function of the nervous system is to tell the truth. When it has been taught to lie, its worth as a guide to caution is permanently impaired. The joys of alcohol, nicotine, opium, or any other nerve-affecting drug belong to the fools' paradise. In the long run, sham emotions destroy as well as torture, "whether of love, religion, or liquor."

The German word, *auslösen*, to loosen up, is well used by Mr. Heinemann to express the effects of alcohol. It dissolves or loosens up the restraints and reserves, the establishment of which in the individual is the main feature of character-building. Character is the power to say "no" when occasion requires. In conviviality, reserves are broken down, and no power or wit is stimulated. The Babel and babble of impulses which the sane man has under control are released. These are not stimulated, but set free. This explains why convivial men so enjoy each other's company, and why any degree of alcoholic enthusiasm is so painful to the man of sober mind. Surely the man who abstains totally from alcoholic drinks is safer than the moderate drinker. I think it equally certain, that, other things reasonably equal, he has greater joy in life than the man who seeks pleasure in unrealities which make for future depression.

But if the use of alcohol were confined to table use of beer and wines, with an occasional extra bottle in good company for refreshment or conviviality, the temperance movement would never have assumed its present militant character. The user of alcohol would fight out the question with his doctor or his employer, as is largely the case in southern Europe. But it must be remembered that the drunkards of the world—and Latin Europe is no exception—are steadily recruited from the ranks of the moderate drinkers. The claim that no one becomes a drunkard who is not predestined to become such thru heredity, weakness, or hereditary appetite has no adequate foundation. There are a few such, foredoomed in a world crowded with useless and pernicious temptations, but for one of these there are a hundred who fall thru ignorance, goodfellowship, and the weakness of good nature. As well say that weaklings, with women and children, are bound to fall thru defective sidewalks, as an argument against safe walkways.

The other line of attack centers on the saloon and the bar-room. Not a word would be raised in defense of these monstrous abuses, as they exist in Great Britain and America, were it not for the money which is behind them. The saloon exists for the beer and whiskey it can dispose of. The wine interests have little part in the bar-room. The more beer and whiskey is sold, the less wine. The grosser evils attached to wine are mostly those of club-room and the "French Restaurant." The beer is the weakest of alcoholic beverages, but it is the most abused, the work of the bar-keeper being to make it lead up to the stronger drinks. A glass of beer in good company is nobody's business. To force three quarts of beer on a boy in one night becomes a social question. When that is done (and this is no

exaggeration of the experience of the vomiting youth who get their first experience of manhood in some saloon of the Brewers' Association) it is no wonder that the community arises to extirpate the public nuisance. In the prohibition movement of today, the business man is more prominent than the preacher, the employer of men more active than the "temperance crank," and the movement, based on economic necessities, has come to stay. No one save the brewers can save the saloon. They can save it only by making it innocuous. If it is made harmless, it will not bring in revenue. To destroy the financial motive in it constitutes a just way of selling alcoholic beverages. This is the motive of the Scandinavian system, which takes from the dealer all interest in the amount sold. But if official graft be brought into the matter, as seems to have been the case in the dispensaries of South Carolina, we have only substituted one evil for another.

In the saloon of today, as largely owned and managed by the Brewers' Associations, we have:

1. A center of drunkenness and dissipation.
2. Around this cluster other vices, as gambling and lewdness.
3. The bartenders are not men of average integrity.
4. The system is worked to the contamination of local politics. In the country, such saloons fall to the level of the uncontrolled "road-house." In the city there are many degrees, but the lowest and most common is "the dive."
5. The drinking-place in every land is the open door to the brothel, the center of the red plague—the two most offensive and dangerous diseases known to modern society.

In England the condition is much the same, but rendered worse by the presence of the "barmaid," and by the recognition by the government that liquor-dealing in all its phases is a legitimate profession, which is not the case in America. The agitation, reasonable or unreasonable, against the liquor business does not in any degree excuse the brewers who own these places from reforming them. They can clean them up with a word if they wish to. No one else can do it. They can make them law-abiding, and, what is better, urge more stringent laws. It is all in their hands. They can, if they choose, maintain establishments which sell beer and wine only, without the more dangerous and wholly poisonous distilled liquors. If there is any reform possible, no one places obstacles in the way of its acceptance by the brewery interests; but any reform would mean a reduced output and reduced profits, and no one, so far as I know, is in the beer or whiskey business for his health.

The relation of drink to poverty, crime, and venereal disease cannot be stated in a single paragraph. In America and Europe, a large part of the crime is instigated or aggravated by strong drink, and, accident excepted, there is not much poverty associated with temperate living. Excessive use of alcoholics is at once a cause, an effect, and a symptom of personal decay, of the progress of weakening of will with mental and moral ineffectiveness.

The comparison of excessive drinking with gluttony and with the undue use of proteid food has but little pertinence. The use of alcoholic beverages is for the sake of the effect of a specific substance contained in them. This substance is a poison in itself, and poisonous if used in large amounts. It also creates a specific thirst to be assuaged only by the substance which creates the thirst. Gluttony is a result of ignorance or stupidity, and its ill effects are largely physical, more or less temporary, and vary with the substances concerned. No one eats an excess of beefsteak for the uric acid it may contain, nor for the decaying residuum which may poison the colon. Nor is there any authority for ascribing any tangible amount of poverty and crime to over-eating. In general, a glutton uses an excess of alcohol with his other excesses.

The claim that prohibition does not prohibit in the dry states has not much value.

In the first place, "dry" districts are surrounded by "wet" ones, and smuggling, legal or otherwise, is an easy process. Maine, for example, is full in summer of saturates and semi-saturates who range its forests and throng the watering places. For their convenience, "blind pigs" exist in many places. Yet in cities, like Eastport, a young generation is growing up of boys who have never seen a saloon, and who have never been led along the graded course from weak drinks to strong, which our saloons supply.

The "blind pig" is an evil from the standpoint of law, a gross and monstrous evil. Every unenforced statute breeds evil. But, from the standpoint of society, it is the lesser of the evils of drink. When the generation of hard drinkers has passed away, the "blind pig" follows. In Kansas, for example, there is a rising generation which feels no need of alcohol, and has no interest in saloons. No statute is going to prevent the hard drinker from finding his alcohol. The patent medicine serves his purpose, if other agencies fail.

The corrosion of the saloons is mainly felt in the years from sixteen to twenty-four. If boys under twenty-one were shut out from them, more than half their evils would be abated. Thousands on thousands of boys step from the saloon to the brothel—not a long step—to be poisoned for life with the most loathsome of diseases, the parasites—animals and plants, the red plague, of which no one was ever certainly cured; and worse, the gonorrhoea and syphilis transferred from the guilty to the innocent, the involving of sterility, disease, and ultimately utter misery. Not many men or boys thus throw away their future when they are sober. Common-sense, when a man is himself, generally controls both passion and curiosity. We hear sometimes of law-abiding saloons. It is even claimed that these are in the great majority. A saloon which is not law-abiding is simply a thug's nest, called in the city a "dive," in the country a "road-house." But a "law-abiding" saloon is little better. The law itself is saloon-made.

The law recognizes as the first purpose of the saloon that of making money. It allows money to be made, even if it be blood-money, coined from the sorrow and distress of women and children, the slaughter of boys, and the decay and disease of men.

It is true that wine-drinking Italy, beer-drinking Bavaria, and other regions where light alcoholics prevail, visible drunkenness is relatively rare. It is certainly true that in a region which offers light alcoholics only, and where these are not pushed hard under a get-rich-quick system, the people are more sober than in regions where whiskey, brandy, cognac, and absinthe are everywhere accessible. The absence of distilled liquors, not the prevalence of fermented liquors, is the real agency in temperance. In regions where children grow up without knowledge of alcohol, you will find a still better record. But there are few regions which have been "dry" for a generation, and commercial interests force alcohol into every community and into almost every family, whether they will or not. Abstinence has never had a fair test in this matter. Meanwhile, we may freely admit that wine and beer are relatively innocuous, when they do not lead up directly to the stronger drinks. When they do, even in Latin America, the results are no better than in whiskey-drinking regions. The effects of brandy on workmen in Paris is the motif of Zola's *Assommoir*. All forms of strong drink constitute a devourer—*assommoir*—whatever the country or race. The actual relation of wine to temperance in southern Europe has never been adequately studied. The problem is not a simple one, and the mere fact that there is less visible drunkenness where dilute alcohol is a daily beverage tells but a small part of the story. The daily partial saturation carries its burden on brain and kidneys and phagocytes (white corpuscles) while on the other hand the spasms of excess are relatively less common. This is a problem of physiology and pharmacology, as well as of social science, and the offhand answers usually given to it do not advance us very far. In general, we may admit that extreme statements on the side of abstinence have often done much harm to the cause of temperance. We may admit that obedience to "the rule of not too much" would take the sting out of the most denunciations of drink, and we may further admit the honesty and intelligence of those who differ from us in theory and in practice.

Yet, with all allowances, there is much hard, practical truth in these words, which Robert W. Chambers puts in the mouth of his honest physician. Addressing a young clubman, he says:

> Alcohol is a poison, and it has not and never had in any guise the slightest compensating value for internal use. It isn't a food. It is a poison. It isn't an aid to digestion. It is a poison. It is not a life-saver. It is a life taker. It is a parasite, forger, thief, liar, brutalizer, murderer. There isn't and there never has been one word to say for it, or any excuse except morbid pre-disposition or self-inculcated inclination for swallowing it. You can take your choice.

THE CAUSE OF EDUCATION

HELEN MARSH WIXSON, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, DENVER, COLORADO

From the North, South, East, and West we have gathered here today in the mighty cause of Education, and from the West I bring you greeting. We claim many things for the West, but nothing greater than the courage of California, for great as was her disaster, great as was her loss, neither was equal to her spirit of courage. Before the fires of adversity had died down her people had taken up their burden, and today a new and beautiful San Francisco greets us. It is the spirit of the West, and in the dauntless West, in this place dedicated to higher education, we fearlessly lift our standard.

Civilization, in traveling from ocean to ocean, passed "Liberty Enlightening the World," and much was made clear, and in that enlightenment we are taking undisputed our way down the path that leads to greater human advancement.

But the tie that binds us to the past should not be neglected, and there are times when it is well for us all to forsake the altars of today and take refuge in retrospect, and if we do so now we may hear the voice of Martin Luther singing, for that voice has not died out of human life. The sturdy form of Calvin, who gave to the English-speaking world the common school, will rise before us. The seventeenth century will fade with the Latin tongue losing a little of its exclusive prominence. The eighteenth will advance beyond the middle age, and the nineteenth will make of education a matter of general social interest, and America will take her place and play her part, for we are a people whose forefathers were committed to the public-school system from the earliest day. Education with them was an exacting religious duty. We have struck on many a pedagogical rock since then, but we realize that the education of today springs from roots sunk deep into the soil of the past, which countless generations tilled and made fertile; and that this is an age of progress we owe to the fact that there has been progress from the beginning.

With the dawning of the nineteenth century there was an educational awakening. The fact that education was our chief industry, without which no commonwealth could prosper, became an accepted fact, and the great Pestalozzi went further and taught the world that education was the chief means by which the masses could be redeemed from degradation, misery, and vice. He also taught that a schoolroom should be a workshop as well as a classroom.

But the greatest lesson of the nineteenth century was that education is a universal right, and it is now not only a duty but a privilege to provide it for all.

There is no sentiment so dear to the American people as that of the Declaration of Independence, and no function of our government that is

so deeply rooted in the hearts of the common people as our public schools. That all men are "free and equal" should mean, if it means anything, that the children of the slums are entitled to the same educational advantages as the children of the rich. As I look about on this vast audience, here in the name of education, I am sure that equalization of opportunities, which means equalization of intelligence, is the watchword, and the children of our country will know *equality* in the public schools.

In our schools, of which we are so justly proud, the tendency is now an economic one. Practical demands are being made, and in nearly all branches insistence is being laid upon the recognition of the commercial side of the subject quite aside from the cultural value. The demand is for tangible results, for the culture of things, the culture of accomplishments, and for efficiency in the broad sense of social service. We are listening to the demands of the everyday world, to the voice of the Commoners, and are making it the first purpose of our schools to educate boys and girls to bring out and develop what is in them, to make them mentally, physically, morally, and spiritually healthy young men and women, for it is to our schools we must look for normal and patriotic citizens. This being true, it is the duty of our schools to give to every boy and girl the capacity for self-support, for the first duty of a citizen in any community is not to be a pauper, and the second, to put as much into the treasury of life as he takes out of it.

I do not mean, neither do I think, that every man and woman is to be of necessity a wage-earner. What I do mean is that the first duty of a citizen is to be self-supporting; hence the first duty of our public schools is to give boys and girls capacity for self-support, for the end and aim of education should be the development of character, and the test of character is capacity for service. Whatever fits a boy or girl for public service in a practical industry is industrial education in the highest sense, and the value of all thought is found when we translate it into deeds. If we are to educate for life it must be by means of life and thru contact with life. We must strike off the fetters of our bookish and wordy existence. Is a degree of more account than breadth of education, more precious than a grasp of the problems of life? Shakespeare became a student of men without a university degree, and Lincoln, living in the open, caught inspiration from nature and humanity.

Our immediate concern should be the character building that will prove the keynote of tomorrow's civilization, for tomorrow's civilization depends largely on the wisdom of today, and in this mighty work we need high ideals. Modern thought is like a crowd hurrying to and fro, and we do not stop to seek out ideals for the problems that confront us—be they problems of religion, education, or public affairs—yet we must cherish high ideals, we must grapple with them daily, we must believe in them, and not only believe in them but act as if we believed, which is the most practical use to which an ideal can be put. We must not, like the boy, dream of building

a beautiful temple with a lofty tower and splendid pillars and then content ourselves with building a woodshed, for we must look to our schools to improve our citizenship—raise the grade.

What makes a country? Not the broad acres, not the mountains, plains, lakes, or rivers. It is the people. Ours is the greatest country in the world. Our mountains are grand, our plains are wide. We want a people on the same grand scale. Yet in establishing public education we are called upon to consider the needs of a country of short history, a people not of one language, not of one inheritance of thought and blood. If our public schools are to fulfill their mission as the chief element in forming our national character, ideals that might have seemed out of place in shaping the school system of even one generation ago must be held today. We hear the criticism that our schools are not meeting the needs of the people of the day. Is this not due to the fact that the American people of today are not the American people of yesterday? In the past our ideal education was the same cultural training that has been enjoyed by the English-speaking people for generations. The education of today cannot be alone that which enables an individual to express more freely that which he has already by inheritance. It must fit millions for a new environment. It must create new thought—create a new type, for we have no national type.

When the United States sprang into being our flag floated over a people actuated by a union of purpose, by a common mind. They were Americanized. Today the population of our country grows daily. New people come from the four quarters of the globe, for the great ships come to us from every port of the world laden with human freight. There is a babel of tongues, a mixture of races—a mighty alien mixture; but America is God's crucible and the public school is the great melting-pot where all the races are fused and re-formed. German, French, Irish, English, Jews, and Russians—the public school is making them Americans. And why not? The children of the Ghetto are using the same books that we put into the hands of our own children, and the children of the races of the world are taught to sing of their "Sweet land of liberty." They wave tiny flags and repeat together the touching words:

> Flag of our Republic, inspirer in battle, guardian of our homes, whose stars and stripes stand for bravery, purity, truth, and union, we salute thee! We, the natives of distant lands who find rest under thy folds, do pledge our hearts, our lives, and sacred honor to love and protect thee, our country, and the liberty of the American people forever.

This is their oath of allegiance, and thus the immigrant child is Americanizing himself, and it remains for our schools to create an American type with readjusted ideals for those whose forebears have long been identified with our country, and create absolutely a type for those who have achieved Americanism, at the same time evolving for both a character that will prove equal to the new duties and to the obligations of our Republic, and furnish common training and common ideals for all the mixed people who

are being fused into one nationality under our flag, and if our great American Republic is ever formed of one people it will be thru education.

A stranger, gay, beautiful, and light-hearted, has come among us. He has taken his place in our schoolrooms, he has disported himself upon the playgrounds of America, where who can foretell the many battles to be won, the weak made strong, courage kindled, manhood roused, self-mastery won?

This stranger came heralded by the twentieth century. His name, do you ask? It is New Education, and under this name he is proclaiming a new method in which he promises that natural interest, which he holds as the keynote of all education, shall reign; that the schoolroom shall become a place of joy; that while acquiring the "three R's" the "three H's" shall also be acquired, and children become perfect in character and in citizenship, for New Education will teach true patriotism. Not the patriotism that leads men to die for their country, but the higher patriotism that teaches men and women to live for their country, the patriotism that ranks public honor as high as private honor, that brands the man or woman who shirks civic duty as great a coward as the man who flees from battle, and he will proclaim that "Peace knows victories no less renowned than war."

This herald of progress would, if he could, trample in the dust many of our sacred traditions, but he would create a love and understanding in the world in which we live—in good deeds, healthy ambition, democracy, and brotherly helpfulness. Let us bid him welcome! For the broader education is a human need and a human right. Thru it we must hold up an ideal of a new and higher citizenship. Thru it we must build up an aristocracy of thought that will hold its own against the aristocracy of the dollar, and thru it bring true union to this, our land.

The message of the nineteenth century to the twentieth was, as someone has said: "So mold public opinion that it shall lead the best men and women to choose teaching as a vocation." This message has been heard, and today teaching is no longer merely a means of earning a livelihood. It is one of the great professions—dignified and far-reaching in its work; and no institution is of more importance than the public school, for education typifies the American spirit, the spirit of liberty, the spirit of equality, and insures to all alike soul freedom. Single-handed we cannot realize the dream of New Education, but as one great family, North, East, South, and West, working together in the mighty cause of education, we may become an example to all the nations of the earth.

PRESIDENT'S ADDRESS

HYPOTHESIS IN EDUCATION

ELLA FLAGG YOUNG, SUPERINTENDENT OF PUBLIC SCHOOLS, CHICAGO, ILL.

[*Stenographic Report*]

In our deliberations in education meetings we almost invariably either undervalue the results of our work or extol them with loud praise. There is another course which seems more desirable: it is that of looking to other lines of work, other lines of investigation which have equaled or surpassed our own, and endeavoring to extract from them something of the method and spirit which pervade them, giving them power over and above that to which we have attained.

No modern movement surpasses science in the wonderful advance it has made. Much of this advance is the result of the method of science, the adoption of hypothesis as its chief tool. I purpose speaking this evening on hypothesis in science and hypothesis in education. In classic and mediæval times nature was a world of permanent things, the problems of science dealt with essences, and even so late as the early part of the nineteenth century, heat was supposed to be an imponderable substance, and light to consist of luminous corpuscles. In the world of mind, the human race was supposed to be a special, final creation, and the problems of knowledge dealt with the fixed, the determined, the unchanging. And so the problem of education dealt with the acquisition of the formulations, the statements of great minds that had written and spoken. Later on, after the invention of printing, education was supposed to be, and is today sometimes assumed to be, the power to master the printed page. Its method was and is known as formal discipline; its tools were and are largely the forms of the dead languages. With the introduction and dissemination of the hypothesis of evolution, there is general appreciation, in varying degrees, of the fact that theories of nature and of knowledge, that institutions of state and of social life, that methods in industry and in commerce, that ideals of education and of a worthy life are all subject to change in a changing world; in brief, that finality both in the natural world and in the spiritual world is death; that change, adaptation, is life.

The working hypothesis in science always includes two fundamentals. The first is developed by the scientific imagination, which so clearly beholds systems of great forces and their relations that it is able to convey to us an idea of the force lying back of that with which we are working. The second element in hypothesis is made up of tentative conditions which admit of change and serve to illumine the construct of the imagination, and to broaden the outlook of the mind which is experimenting with the unknown force. The failure of the scientific imagination to construct comprehen-

sively, or of the scientific observation to detect and understand unforeseen conditions often delays man's control of a force.

Scientists have not always been happy in their hypotheses. The great Newton delayed the advance of physical optics many years because of his advocacy of the theory of luminous corpuscles. We all know from experience that scientists have failed to attain to that conception of ventilation which would furnish fresh air in schools. Their conception has been limited to the introduction of warm air into a schoolroom and the elimination of one objectionable factor, carbon dioxide. Today scientists are awaking to a more comprehensive conception of ventilation. Now they are endeavoring to give to the human being in the schoolroom fresh air like the pure air of nature outside and to remove all things which vitiate the air within. Erroneous ideas have been active in the hypothesis of lighting; as a result, a large percentage of the boys and girls, who complete the school course of twelve years, graduate wearing glasses, because this problem of lighting has not been fully solved by the oculists and architects of our age. One of the departments of this Association has entered upon a broad and deep study of the subject of conservation of vision. Generous appropriation should be made to foster its investigation.

Long ago I used to talk about scientific method and the scientific imagination in education; but there are many who construe the use of the word scientific to mean an exact method, the one used with the forces of nature, and so they object to scientific method in dealing with children. I believe that, if we would rise above the idea of finality in things spiritual, we might have the term, the *educational imagination*, with a significance corresponding to that of the *scientific imagination*. With a recognition of hypothesis in education having for one of its fundamentals the construct of the educational imagination, might we not have a larger view of education than has yet been presented? We need, however, not only the larger ideal portrayed by the educational imagination but also the alert and intelligent attitude that discovers unusual conditions and their meanings which necessitate change. We have had too many limited theories of education which have narrowed our work and made us demand change because of sheer weariness resulting from their cramping influence; we have asked for change for the sake of change. Some years ago we caught the expression "the whole child must go to school" and treated it as if it were a theory. What was the result? The whole child must be going to school was interpreted to mean that everything in the heavens above, in the earth beneath, and in the waters under the earth, must be taught him while in school; and today, from one end of the country to the other, courses of study are overloaded; the cry all over the land is that the children are being smothered by the over-much forced upon them because of the narrow interpretation of "the whole child must go to school." Another term has sprung into popular use. From Maine to California,

from the Great Lakes to the Gulf the public school is spoken of as a great "melting-pot." Boys and girls in that imagery are seen as lead, as brass, as silver, as gold, all fused in one alloy. Carrying out that image, the public school becomes a place in which we are endeavoring to make all children alike. Eventually Americans would be people lacking individuality; America, a giftless nation. "Our land must be the promise and reliance of the future"; its public school must not be a melting-pot. Our public school is the matrix of a nation teeming with life. All ideas under this imagery tend to recognize and develop life, power, and the eternal in each child. We must hold to the idea that if our public school is the matrix of a great nation, the matrix of a nation of nations, it must be great in the opportunities which are offered every boy and every girl entering its doors.

Plain people like ourselves distinguish so sharply between mind and matter that to acknowledge that the work of teachers rests on hypothesis is in the thinking of some of us "to go down to eternal night"; to use hypothesis with regard to this or that force in nature is to accept modern scientific method, but to use hypothesis regarding this or that power of the mind is, some think, to desecrate spirit, to reduce it to the level of matter. But what is the influence of a theory of finality in education; of the insistence that a dogma of the school or a given definition of education is the final statement of all that is involved in mental and spiritual training? To announce a theory of education as fixed, determined, all-comprehensive, develops uncertainty and unrest in the teaching corps; not the sense of unrest that urges on to the achievement of better things but the feeling of unrest that comes from a consciousness of insecurity in the support upon which one leans. All men and women engaged in teaching see the social and industrial movements of the American people, and they know that the school is endeavoring to catch the spirit and move upward with the nation into whose life the children will soon enter as active workers.

Then again, the acceptance of finality in educational theory minimizes responsibility and creates insincerity. If all that can be known about the ways and means of mind in its immaturity is known, it is unnecessary to attempt the interpretation of the unusual that confronts us; if we are aware that strength is there, and yet we discredit it because we are committed to a blanket theory of education and the mission of the school, our course is disingenuous.

One may ask why argue for hypothesis in education. Rare are the men and women teachers who are not working over their "problems," whose conditions are summed up under dull, wayward, queer, or uninteresting, as applied to a boy or girl in school or a student in college. There is not a teacher in this room who if asked the question, "Who was your problem last year?" could not answer instantly. If there is this general

attitude of recognition of the problematic in children and youth, then why bring forward the subject of hypothesis in education? Because too often the theory underlying our procedure is accepted as the final, the unchanging constructive ideal of the development of mind and character, and also because the unusual, the perplexing, is too often studied as a variation *from* the one true type instead of a variation *within* the type human. Our problem among the normal children and students lies within the type, and if we have the scientific, the hypothetical, attitude of mind toward it, our imagery, our theory, our knowledge of humanity, our generalizations as guides will all be enlarged. In every organization, whether it be the school with the guide and the learners, or an association of teachers, if there is to be a continuing administering to the need, to the intellectual and spiritual powers of the members, there must always be the use of hypothesis. No type remains unchanged. Evolution is going on, a type may be advancing or it may be retrograding, but it certainly is evolving out of its own conditions and implications something different. We must keep uppermost in our minds the two fundamentals in hypothesis—the large ideals of education with its many complexities, and the tentative conditions for which we watch and thru which we adjust our ideals. In this way we shall avoid that fixed, final determination of the ideal of education which is destructive to life.

So it is with this great Association which meets here tonight, which in the early days was founded on the theory that the leading educators in the country should have means of coming together, and later was organized to have financial resources that enabled it to carry on its affairs as comported with the dignity of the teaching body of this country. With all its great work, it is evident today that there is another step not yet successfully taken. Those who are most closely identified with the organization should ever maintain the scientific attitude toward it, enriching and enlarging its underlying hypotheses. If the organization gives honor to an infinitesimal part of the membership and then leaves the guidance of the activities to that small part, there is missing the alert, interested attitude that would hypothesize the seemingly opposed elements and determine what of merit there is in the small leadership and what in the large membership. The National Education Association should so influence teachers that thruout the country the democratic principles underlying this government shall be a part of the daily experience in the daily life of every school. To effect this the Association should bring together the men and women administering college and school affairs and those teaching in the schools and colleges and by its method so illumine their hypotheses of education and quicken their vision of life that they shall have power to discern and reinforce life and the eternal in every boy and girl, youth and maiden coming under their influence.

AN APPRECIATION

ALFRED RONCOVIERI, SUPERINTENDENT OF SCHOOLS,
SAN FRANCISCO, CAL.

I deem it a flattering compliment to be called upon to speak on this occasion and to add my small tribute to the gracious words that have been spoken. I assure you that we feel deeply the honor you have conferred on us by choosing San Francisco as the place of the Forty-ninth Annual Convention of the National Education Association.

We rejoice in your coming, the effect of which must be to elevate the character and advance the interest of the profession of teaching and promote the cause of popular education.

Your presence will inspire us with fresh enthusiasm for our work, and we will carry into our schoolrooms renewed energy. Our fifty thousand school children will reap the benefit of our contact with you.

In 1906 it was to have been our pleasure and honor to welcome and entertain the National Education Association, but a conflagration unparalleled in ancient or modern times overwhelmed us and laid our loved city in ruins. Our business was wiped out and our people were without food and shelter. Homeless, we could not entertain you. Fate had decreed that we should become the recipients of the bounty of the world. We experienced the fact, however, that a calamity has its compensations. No sooner had the wires flashed the news of our catastrophe to the world than there followed the greatest outpouring of brotherly love and sympathy recorded in the annals of history. While the embers of the great fire were yet alive and still smoldering amid the ruins they had wrought and while our citizens had hardly recovered from the appalling catastrophe, by land and by sea, there flowed to our city streams of relief. The sympathy of the Republic and of the nations beyond the seas was awakened, and magnificent was the generosity that was bestowed on our people.

Teachers and school children of the United States were animated by this common spirit of brotherhood. Immediately there came substantial aid. Carloads of food and clothing were hurried to us from every village and hamlet of California and neighboring states. Cheered by the sympathy and the generous charity of the nation, aided and sustained by the millions of dollars which were so magnanimously given to us, we resolved that a new San Francisco should arise; that the beautiful of yesterday should be restored and that the future city should transcend the old in solidity, elegance, and in all things which make a community great and attractive.

In a miraculously short time our people were fed, clothed, and housed and the new San Francisco was begun. From every direction came contributions from teachers for the relief of teachers. School children heard the cry of distress and sent their offerings to help re-house the homeless school children of San Francisco.

Among the hundreds and thousands of benefactions bestowed upon us during the dark days of affliction, and in the midst of the distressing times, nothing was more touching than the thought of teacher for fellow-teacher, of school child for school child, and no help was more gratefully received than the contributions of the school children of our country for the construction of a school building, and the many gifts of food, clothing, and money sent for the special relief of teachers made destitute by the great fire.

The funds for the relief of teachers were distributed by a special committee of teachers and citizens and the members of the Board of Education presided over by the then president of the Board, Hon. Aaron Altmann. These spontaneous offerings relieved much actual distress, and developed in its fullest significance the text, "It is more blessed to give than to receive," for many of our teachers had fled from burning buildings with no worldly goods but the scant clothing which they wore.

With the contributions of the children a beautiful school building was in large part erected. It is located in the northern part of our city, graceful in its architecture and characteristic of the early Mission Fathers of California. It was given the Spanish name of "Yerba Buena," to commemorate the first name of the village of '49 that has since grown to be the metropolis of San Francisco. It stands as an eloquent memorial and a fitting monument to the generosity and loving thoughts of the school children of the Republic toward the school children of San Francisco. When has there been such a teaching of morals?

The rehabilitation of the San Francisco School Department was commenced five days after the calamity of April 18, 1906. An inventory of the losses sustained revealed the fact that thirty-two schools, out of a total of eighty-three, had been destroyed, involving a loss of nearly $2,000,000. Then came a splendid exhibition of hope, pluck, and energy. Our teachers, many of whom were themselves refugees, volunteered their services to those more unfortunate than themselves. They served with the Red Cross society on committees of relief, health, and order. They did yeoman service wherever duty called. For our refugee children schools were opened in tents in Golden Gate Park. Altho school rehabilitation was carried on under most adverse conditions, yet three months after the catastrophe our schools reopened for regular work.

Ever alive to the educational needs of the children, our citizens have authorized school bond issues amounting to nearly $9,000,000. Many of our new school buildings are now finished. They are substantial and models of school architecture. They far exceed in their beauty, strength, and equipment those that were destroyed. Behold, the Phoenix has arisen from the ashes!

We point with pardonable pride to our achievements. We realize that the compensations of calamity are made apparent after the lapse of

time. A mutilation, a cruel disappointment, a great loss seems, at the time, unpaid and beyond compensation. But the years reveal remedial and beneficent forces.

Let me say to you that the people of San Francisco feel an honest pride in the good men and women engaged in the work of our public schools. Without flinching and without retreating, undaunted in the presence of the greatest conflagration of all time, our teachers bravely stood their ground shoulder to shoulder, and notwithstanding the difficulties and adverse conditions that have confronted them ever since the dire calamity that befell our beloved city, our department has, thru the zeal and patient efforts of our teachers, produced the most satisfactory results in education and has earned the grateful consideration of our citizens. Our people recognize in the fullest that teaching is an exalted calling, that the work and influence of the teacher abide in the boys and girls, and that when the men and women of a profession are brought together thru sympathy and become associated on the principle of mutual aid and common labor they become united by the gentle bond of fraternal love.

We acknowledge your gifts and our gratitude is the natural pleasure we feel in our present prosperity.

We appreciate the generous impulse which prompted you to help us in our hour of need. We abundantly value your kindly thoughts and your friendship, your cordial good-will, and the closer expression of the great brotherhood of the teachers of the United States far more than the material things you sent to us. To withdraw something from oneself and give to another is a point of common humanity. It exemplifies altruism and the brotherhood of man in the highest. To carry with us the consciousness of your generous deeds and the thankful remembrance of the love and benevolence of which we have been the object brings joyful pleasure and everlasting gratitude to our hearts. Like brethren, whether you had little or much, you divided with us in time of need. For all this loving thought, the children and the teachers of the old and the new San Francisco extend to you and to those whom you represent from every corner of our great country their sincere thanks and deep appreciation.

You shared our sorrows of 1906, and now do we welcome you and bid you share and pass the cup overflowing with the joys of 1911. We "open our hearts to you wider than our gates," and welcome you to our homes and firesides. And now, with devout thanksgiving to the "Lord of Hosts," thru whose love, power, and blessings we have been enabled to right ourselves, we pray that your deliberations may be crowned with success, and that you may enjoy your sojourn with us as your labors deserve; and when you have gone hence we shall remember with grateful hearts the welcome guests that gave much more than they received.

REORGANIZATION OF AMERICAN EDUCATION

JAMES H. BAKER, PRESIDENT, UNIVERSITY OF COLORADO, BOULDER, COLO.

I. ECONOMY OF TIME

Someone in a vein of satire pronounced the "Reorganization of Education" an ambitious subject. Since the majority of educators are engaged in studying or experimenting upon some phase or reorganization, an additional essay need not be regarded as a novelty. The problems are many, but three or four are vital and first to be considered in a brief address. These may be stated as follows: efficiency and economy of time in general education; industrialism and humanism; will training.

In presenting the first topic I refer incidentally to the Council Committee on Economy of Time in Education, because I shall draw somewhat upon their tentative conclusions. It may be of interest to know that they have drafted for their further discussion a provisional report. They have enlisted in the study committees representing such organizations as the National Association of State Universities and the National Department of Superintendence. Moreover, the co-operation of hundreds in examining phases of the subject has been secured by members of the Committee. Perhaps arousing interest in the discussion is the best work of the Committee at present. Upon the subject, Economy of Time, I have had the benefit of scores of opinions and experiences of active teachers fully and frankly stated, else I would not attempt a review of this part of the field. If conclusions reaffirm a value in some principles that are old enough to have a history, I beg that I may not hear the usual cheap argument of "not up to date." A view that does not accord with present ideas may be both retrospective and prophetic.

These criticisms are prominent: There is much waste in general education, including elementary, secondary, and college. Of the material employed little has permanent value, or indeed any value whatever, and less is retained. Of the methods used only a small part gives power or character. Results are not proportionate to the time and expenditure, and the public are asking for shorter time, greater efficiency, and an adjustment of educational aims to real civic needs, both practical and ideal. But reform is slow. We are bound by traditions difficult to break. The question is complicated by all sorts of minor or inconsequent inquiries, when it should be a simple one of looking at the obvious goal and taking the direct road to it.

The first remedy is selection and elimination as applied to subjects and topics of study. The maxim of "faithfulness in small things" does not mean indiscriminate emphasis in use of the material of learning. Judgment of relative values is a chief need of the teacher. Quality not quantity has a new significance today. Knowledge and power come from the use of a few typical things by methods that beget thought; inspiration often

springs from a word with a flash of insight. For instance, more would be gained by thoro understanding of a dozen chief processes in arithmetic than by any number of mechanical solutions of problems; more by using a dozen leading principles and experiments in physics than by "completing the textbook." In elementary science, method and interest are of first value. While much reading in history and literature is desirable, thought and inspiration come from a wise use of a few selections. I was introduced to Homer and to mythology by hearing an old farmer recite a passage from Pope's *Iliad*, and read Macaulay's *England* on hearing a quotation from it with appreciative comments. "Books that have helped me" and favorite poems that have inspired are few. The essence of Stevenson is contained in a letter, an anecdote, and a prayer. Read Stevenson, of course, but study these and get them into the soul. If it is objected that this is a condensed-food theory, I reply that it is not necessary to eat the husk and shell to enjoy the milk in the cocoanut. Extent of ground covered as a criterion for promotion or for admission to college is the American standard of quantity applied to our education. Let the teachers, or rather the responsible superintendents and principals and leading educators, employ courage equal to their convictions, and proclaim the gospel of quality. "Enriching the curriculum" was a great idea, but it has been subject to endless abuse, and the time has come to apply the philosophy of the "simple life" to education.

The next source of economy is adapting method to the nature of the subject. The doctrine that all subjects have a like value, should be taught in the same way, and produce the same results I believe to be utterly false and everywhere harmful. It applies the methods of science to such studies as history and literature, and sanctions the "unit-system" in college-entrance requirements—a device convenient enough for the colleges, but destructive of any well-balanced organization of high-school courses. Subjects of prime importance whose principles have the widest application are especially fitted to cultivate accuracy, perseverance, and endurance. Others should be taught by other methods requiring less of the pupil's time and energy. Some fields should be covered by reading, talks, and lectures with no view to examination. To repeat—time can be saved in elementary and secondary education by varying the method of instruction according to the need of the subject.

I know this involves the question of whether "general" education is theoretically possible. If we were dependent upon certain humorously artificial and inconsequent laboratory experiments on the subject, we should be in a sad case indeed. Fortunately common-sense generalization from human experience rejects hasty inferences from inadequate experiments. It would be well, before it is too late, and "general" education is reckoned among the lost arts, to send a questionnaire to the old boys and learn how many are stout in the belief that their real education came from drill in

arithmetic, English grammar, Latin, and formal logic; that from these studies they gained accuracy, power of thought and expression, the detective and determining skill of the scientific method, and readiness to discover fallacies in the field of argument and of business; that their system, accuracy, and scope in practical affairs are largely due to formal training. We know that general power means nothing except as constituted by specific elements—certain ideals of method and of attainment, ways and means in study and investigation—but these do "transfer" or "spread" and cover other fields of mental effort. Moreover, general principles thoroly grasped have endless points of contact with concrete instances, and deduction, with applications, from formulated knowledge is a chief work of general education, and is the most efficient and economical. Easy ways, infantile inductions, scatter-brained methods have become fetishes—and I am still mindful of the just claims and the beneficent features of the ruling educational doctrines.

Waste occurs in certain culture work of the grades. Too little may be left to soul development thru the influence of natural surroundings. Artificial teaching of what should be spontaneous growth, imparting inspiration by rule, formulating sentiments are unpedagogical. Nature is subject to too much paternalism. Place in the time-table is not needed for many culture influences; they come, if at all, thru a personality or a suggestion and are incidental to the day's work. Many faults may be committed in the name of kindergarten and of nature-study.

Other ways of economy may be merely mentioned: Avoid excessive use of rules of method; save time from the laboratory for a knowledge of the subject; for interest and motive create a vision of the value of the best things; use illustrations from the life of today, and in every way vitalize the work of instruction. By some means, constructive or destructive, banish lazy indifference, which was wisely regarded by the early church as a deadly sin.

The elementary and secondary periods of instruction should give the tools of education, the methods of study, the power of work, some important knowledge of selected subjects, and the desire to learn and the ability to think. It should plant a growing sense of appreciation and a healthy philosophy of life. By the methods suggested it is believed that as much can be accomplished at eighteen as now at twenty, as much at twenty as now at twenty-two; that the whole period of education, general and special, can, without loss, be shortened at least two years.

Here we reach the college and its problems. I have little patience with some criticisms aimed at culture education and the follies of college life; they are frequently the carpings of ignorance or prejudice that lead nowhere. There is reason, however, for an intelligent examination of the whole question as related to economy of time. The serious faults of the college are due to the length of the whole period of general education, and the elements of inefficiency and waste.

This country should adopt either the English or the German type of university, but not both. In foreign countries the student enters the university, nominally at eighteen, directly from the secondary school. We interpose four years of college—largely a waste in time and method. Do not misunderstand at this point; the idea is not to lower the standard of American education, but rather to readjust and strengthen it. It is proposed to end the college and begin the university at twenty instead of twenty-two, thus saving two years. Of course it is humiliating to concede that our preparatory education must be prolonged even two years to equal the standard of the English or German secondary school. But, if we may draw safe conclusions from the report of the English Commission and from the Oxford experience with American students, we are lacking in thought power and perseverance—and because of methods that in part can be remedied. The university—that is, the graduate school—and the last two years of college should be shaken together and reorganized into one division of education, namely, a real university, preparation for which should end at twenty. Progressive university colleges have already prepared the way by approximating the last two years to the university type. The plan would eliminate the duplication between high schools and colleges, and reduce the time limit of preparatory education. It would offer university methods earlier—an immense pedagogical gain. It would have another advantage. The Ph.D. candidate now proceeds, always under careful guidance, thru four years of high school, four years of college, and three or four years of graduate work. Any one whose originality and efficient power survive the test is indeed a proven man and worthy of responsibility. For the college teacher an earlier university course and subsequent independent study, original production, and long probation would be more than a substitute for this work of supererogation now offered. Years ago, on my first visit to Oxford, in conversation with the Secretary of the Examination Schools, the length of the B.A. course at Oxford was discussed, and the fact that further residence was not required for higher degrees. I remarked that in the newest and wildest part of a new and wild country, among Ute Indians and mountain lions, we had a university which required four years beyond the secondary school for the B.A. degree, an additional year of residence for the Master's degree, and three years more of residence for the Doctorate. The secretary replied indignantly, "I regard that, sir, as a work of supererogation." I then thought he was wrong. He was right.

In view of such considerations the Committee referred to has agreed provisionally to a time scheme as follows:

Elementary education	6–12
Secondary education	12–18
(2 divisions: 4 years and 2 years).	
College	18–20 or 16–20
University (graduate school and professional schools)	20–24

The tools of education can be acquired at the age of twelve, and there are reasons why high-school methods should begin at about that age, when so many pupils leave the elementary schools. The division of the secondary period into four years and two years lends itself to the plan for industrial education as will be seen later. Moreover, smaller high schools can end at sixteen; larger high schools at eighteen or twenty. Small colleges can take pupils from sixteen to twenty, thus maintaining a four-year course. The universities can retain two years, namely, from eighteen to twenty.

Let us see what are the essential consequences of this time scheme in terms of pedagogy. Many processes of mental training are easier in the earlier years. Beginning high-school methods at twelve will meet the need of pupils who at that age are restless and are seeking larger and more varied interests. Twenty is a better age to begin genuine university work than later when the mind is less elastic, energetic, and adaptable. Elimination of useless material will stimulate the interest of pupils and result in harder and better effort—the time would be filled with important work. It lessens the period of work that to the pupil appears void of purpose. It makes a better division of time between receptive study and the larger motor activities.

Moreover, we must consider results in view of the just claims of our civilization today. Educational aims must be adapted to civic needs. The history of education shows that it has always been closely related to the dominant needs and ideals of the people at any given period. There is no doubt about the public attitude today. The schools will be compelled so to reorganize as to meet them in the most efficient way. The proposed time scheme makes a better economic division between preparation for life and active life. It enables men to become established in life earlier, and to give more of their best years to social service. It will keep a larger number in school thru the elementary and preparatory period. It will eliminate waste and foolishness and thus make more serious and efficient citizens. By introducing earlier the methods that produce power, and by selection of the fittest, the proposed reorganization of college and university will enhance the intellectual strength of the nation.

It is not intended to make the preparation of teachers a distinct part of this subject, but it cannot be wholly omitted. For secondary teaching scientific knowledge and power are the first requisite. Here a little learning is a dangerous thing. Sound scholarship, such as only the best college and university courses can furnish, alone will remedy the weakness which foreign critics believe they discover. High schools and colleges agree that study of education must be part of the teacher's preparation. College departments of education have here a great field. They can bring the student's mind in contact with the masters of educational thought; they can use the pedagogy found in great literature—the best source of the wisdom and inspiration of teaching; they can encourage independence and originality in the acquisition and use of principles; they can conduct their work

on the plane of liberal culture, and in an atmosphere of scholarship and research. The normal schools, in the field of elementary education, render a service beyond the need of commendation, altho they too have reason to pray without ceasing for new light. But the tendency of normal schools in some sections of the country to assume also the function of the college and college departments of education in fitting teachers for the high schools, at present, is met with large opposition. It is an important economic question, but, comparatively this is of little consequence, and the mere desires and ambitions of the colleges or schools themselves of less. I am firmly convinced that performing the function of the college in an institution which is in no way its natural or congenial home, and where of necessity method receives chief emphasis, will bring much loss and little gain to the high schools, and will in every way weaken the scholarship of this country. While so large a percentage of the grade and rural teachers lack professional training, expansion upward is not the right direction for the energy of the normal schools.

II. INDUSTRIALISM AND HUMANISM

The problem of reorganization includes very distinctly vocational education, and only a beginning of the solution has been made in this country. The excellent report of the Council Committee last year makes unnecessary more than a summary of the situation and some suggestions on the questions involved. The material interests of the country must be promoted by the extension of commercial, industrial, technical, and trade instruction. The rights of the individual and the welfare of society require practical training leading toward useful occupations for a large class of youth whose period of education is limited. There are two views of the means of accomplishment. A large number would provide separate schools. The more conservative would relate all such work to the regular schools, select the industries emphasized in each locality, and make the training for them merely preparatory. This special work would be elective, and occupy about one-fourth of the school time. Preparatory industrial courses are placed at the age of twelve to sixteen; trade courses as such, leading to apprenticeships, at sixteen to eighteen. It will be seen that the time scheme previously discussed, making the high-school period twelve to eighteen with two divisions—four years and two years—readily adapts itself to these needs. Of course in large cities there are special problems calling for earlier technical preparation for various industries.

I believe that most progressive men, who represent high schools and colleges, in a general way, take the affirmative of this question. They also stand for the professional and technical side of the universities. Many university colleges are "vocationalizing" the last two years, allowing or requiring students to choose studies leading to engineering, medicine, law, teaching, business, or at least to select a particular line of culture.

But men who take a broad view cannot go the entire way with the radicals. To begin industrial training before the foundation of education is laid, to teach the principles of science only as growing out of industrial needs or the applications of science without science, to yield children to the merciless demands and economies of trade, to provide vast and expensive special equipments of every kind, when the great problem is to connect all vocational training with existing plants and actual industries, to ignore all culture and deny the possibility or value of general education—these are at least objectionable propositions. The true aim is to maintain a balance between the material and the spiritual side of our civilization and between skill and foundation principles. If there is a demand for the practical, there is also an insistent claim for the humanistic side and for profound scientific knowledge.

There are two kinds of philosophy that largely dominate the life of America, that of Bacon and that of Rousseau. We recognize the marvelous stimulation to human thought and material civilization of Bacon's influence, and the beneficent humanitarian influence of Rousseau. But the misuse of the one fosters the evils of the day—worship of power, success at any cost, materialism; from the other springs the doctrine of the individual temperament with all its evils of pursuit of inclination, unwise election, easy methods, cheap amusements, and anarchy of soul. These two influences rule too much our schools and enter too much into our national life. Any reorganization of education will fail unless it is pervaded by sound pedagogy and a healthy philosophy.

I believe we must adapt to present needs the essential principles of Humanism. There is not time, nor is it necessary, to go into the history of Humanism, point out its virtues and faults, or make a careful definition of it. We may assume what it should mean today. It believes in the value of organized and transmitted knowledge, in discipline from studies, in selection of the best. It accepts and uses the best in tradition, and works on the plan of keeping civilization alive. It believes in pure ideals, in standards of excellence and character. It appreciates the importance of the higher viewpoint that shows things in their right proportion, extent of vision, the self-possession that is not swayed by mob sentiment or led astray by long discarded false doctrines. It advocates a culture that has a moral backbone. It places character above success, and wisdom above knowledge. Since Humanism is interest in the lives and thoughts of men as revealed in language, literature, and history, it may include all the implications of his nature. Hence it stands for an idealism that makes of the universe a living thing, sees in it a universal will, holds as supreme some form of reverence, and a mighty faith in the affirmative side of things. Withal it stands for real progress, wise sympathy, and a democracy that gives a just opportunity for nobility of intellect and character.

As conservative educators grant the reasonable claims for practical

efficiency, so they acknowledge the claims of science and its limitless contributions to progress and human welfare. But the higher interests center in man as man. As expressed in a little romance of self-denial, noted incidentally: "Just *things* don't count very much—it's people that does." Moral truths that "smite the soul as with a sword," purposes that aim true, great causes, poetic insights, the good and strong will—these are the measure of real life. Romance is a spiritual thing. Poetry and philosophy alone can create a transcendent interest in nature—reveal it as pervaded by life and purpose. Labor, all material interests, life itself have not a sufficient meaning, unless to them is imparted some spirit of romance whose source is an ideal of absolute value. As it were abroad and desolate, man must have thus some concealed spring of joy—like Stevenson's Lantern Bearers, who, in the autumn nights of cold and wind and rain, among the lonely sand drifts, could exult and sing at the hidden knowledge that they had bull's eyes at their belts. If you have not the patience for wise treatises, and must be entertained, as is the spirit of the time, by an impressionistic style, turn to Chesterton for a while—he is not so crazy as at first appears, and may have a message for you.

There never was so great a need of an intelligent view of the place of Humanism in education. Leaders of educational thought have here their greatest work—nothing short of giving teachers and the public a sound philosophy of life, a true estimate of real culture, and the ways and means of making humanistic studies effective in education. For this high service of the teacher are needed—first, a strong personality, a cheerful outlook, an idealistic view, a power of appreciation; second, a knowledge of the means of education for power, of vital moral training, of imparting inspiration by the deeds and thoughts of men. This view is not an argument for classics, only for the principles of humanistic study; it does not neglect science or industry; it endeavors to maintain a proper balance in education. The people demand that the spiritual side shall find a place in our schools and in our national life, and any scheme of reorganization must reckon with the fact.

III. WILL

If there is a criticism more just than another it is that the schools do not give satisfactory results in terms of will. Will training is the third of the vital problems of reorganization, but, perhaps, first in importance. Ease and luxury are condemned for making soft bodies and feeble souls. Easy living, easy work, following likes and dislikes, never facing necessity, ruin character. With all our progress it is claimed that in point of will power we are inferior to other periods of civilization. This is an evil of society, but also of the schools, and because much of the educational philosophy is soft. Rousseau's doctrines are not a safe guide in character-making. If nothing else, the schools must teach accuracy, perseverance, and endurance. A child that suffers no hardship is on the road to perdition. It is not neces-

sary to go to the treatises on ethics; read Kipling's recent poem entitled "If" and get the whole philosophy of the will; use it for yourselves and for your pupils. Kipling knows the doctrine of the will in character and the poetry of the will in industry, and, in the better sense of the word, maintains for it an imperial standard. And by the way, we never shall have an inspiring science of education until we can read it out of writers like Kipling, Stevenson, Thackeray, Dickens, out of the Bible, out of the philosophers and the poets—revelations of human nature surpassing the professional formulas.

I know the ethical significance of science and of industry; they give society a kind of material moral backbone. But many mechanical occupations require morals more than skill. As machinery more and more does the work of the world, the demand for responsibility will increase—the sense of duty that prevents waste and loss and accidents. The lack of efficiency in most industries and professions, when it is not a lack in foundation education, is largely moral. Humanism regards not the work only but man's attitude toward it. The business world will make a fearful economic mistake, if it insists on making of youth machines instead of men.

In a larger sense will depends upon great life motives that control the aims and acts of every day. The alleged feeble spiritual power of the schools today is the occasion of the fresh interest in broad religious education, in the wise use of the Bible as furnishing great moral insights, and in the essential ideals of our civilization. It shall be a chief work of the reorganized schools to inspire youth with a few of the great sentiments that are the saving principles of the nations. These must be made convictions, such as men fight for, like the chivalric sense of honor or truth. Zola's *Truth* is a classic on the schoolmaster's power to teach a living and lasting sense of verity and justice. All culture must have a moral basis. Without it culture is selfish, enjoys its own attainments, and seeks pleasure. Whenever the moral element has lacked emphasis, education and civilization have suffered. Omar Khayyam, clothing an unsound philosophy in surpassingly beautiful verse, represents degenerate culture, and oriental decay. Martin Luther, singing his song of faith and defying the devil, represents the strength, health, and optimism that have made a triumphant western civilization. This is not a matter of rhetoric or of impossible ideals. While we recognize the scientific methods and the spirit of truth employed in the researches of psychology and pedagogy, and the many sound contributions to the science of education, we must feel that some of our educational principles are wrong and that the pedagogy of ethics is still inadequate. Bacon, Pestalozzi, Froebel, Spencer, misunderstood and misapplied as they often are, may do much to weaken a healthy philosophy of education and of life. There is a lack of food that makes men of sterner stuff. For the higher psychology of ethics turn to Plato, the Old Testament Proverbs that "open all the abysses with a word," the arousing and strengthening forces in literature, all prophets of the soul.

Whenever I have discussed these questions as related to the ideals of our civilization today, I have been promptly informed that I was "all in the air" and that the attempt was futile. Does anyone doubt that our civilization needs efficiency, the vision of a spiritual ideal, the strong will for great causes and moral crises? Does anyone doubt that the people are demanding these results from the schools? Does anyone doubt that reorganization must come, if not from within, then by outward compulsion, and that it is the better part for us to get about the work speedily?

THE OPPORTUNITY OF THE TEACHER

MRS. EMMONS BLAINE, CHICAGO, ILL.

The opportunity of the teacher is the greatest opportunity in the world today or ever. In these United States of America today it might be called the opportunity to save the country.

I suppose to every age of the world there appear reasons why the needs of that moment are the most urgent that could be. To the eye that sees mistakes, the correction of those mistakes becomes of paramount importance. When the world in sufficient mass has seen its mistakes and has corrected them and has thus proceeded to a further stage of its development, the heights to which it has arisen may dim the height of those ascents it has but just scaled, and the effort, the struggle, the means that accomplished the ascent, may fade in importance to the backward view.

But this is true only of the backward view that loses, from its limit of vision, all detail. If we could see history as history is, it would be a succession of present views and we should see the vital nature of all steps of humanity forward or backward; and we should see the pre-eminent importance at each step of the forces that advanced or retarded progress, of the leaders who pointed the way.

While it is true that the dimness of the before and after helps to make our own day stand out to us as pivotal, it would be a mistake to suppose that this emphasis is false.

For a full view of the march of humanity would reveal to us that we are a part in a great process of formation, and that each moment that gathers up the past and constructs it for the future is pivotal for all that is to come.

It is strange that we take to extremes in our view of our own relation to the whole. If we do not grow too anxious and even foreboding because of our responsibilities, we are apt to sleep at our posts and consider ourselves mere cogs in a machine, to take what comes from before and hand it on to what comes after in a mechanical fashion, forbearing, almost dreading, it sometimes seems, any imprint of our own upon it.

We have not yet learned the right view of our own part in the progress of the world—the attitude of inheritors of riches verily, who are thereby constrained to put them to better and better uses for succeeding genera-

tions—the attitude of constructive responsibility, with entire courage as well as wise conservatism.

There are elements in the times we see and feel around us that give us the keen sense of the pivotal nature of our own day.

Our nation was not begun as other nations. Our country did not, like Topsy, just grow. It was brought forth in the throes of migration and revolution—a child of oppression. Its foundation was an assertion of human rights, a revolt against human wrongs. Its beginning was a fully conscious and highly determined effort to attain for a people the principle of liberty—freedom for the individual to worship God according to his own conviction and freedom for the community to govern itself by representation. It was a demand for privilege—the privilege of principle—and that privilege for all under its constitution.

We stand among all the nations as the great experiment of a wholly representative government. The nations of the earth turn to us with eyes of longing and expectancy and question, as to the result of a last chance in the westward course of Empire on this old round earth—and we have their questions to answer:

Is our representative government a home of religious feeling?

Is our representative government an avenue for the true freedom of a community's government of itself?

Is our demand for the privilege of having principles and standing on them, having its fruition in our being a nation of principle?

It is a common experience to find those of other countries, who come to our shores with these questions in their minds, carrying back, beneath their courteous appreciation of all of our achievements, a sad feeling of disappointment.

Their view of us is not so important to us as our view of ourselves—and it is not so much to our point to ask what they find, as to tell ourselves what they may find, to disappoint them.

That our country was founded on principles no one can question. Whether we are carrying it on on the same plane may be questioned.

We must freely say to ourselves, if we see clearly, that we cannot call ourselves a nation of strong religious feeling. It is but to put the question: Would we be more apt today to seek a country where we could be free to worship God after our own conviction or to stay in any place that furthered a material advantage or satisfied a selfish interest?

We must more freely and surely say, if we see at all, that our principle of self-government does not always work, does not always have much relation to the will of the community; but furthermore, that the community is half the time more concerned that the government does not interfere with its projects to get ahead of its neighbor, or to gain the almighty dollar, than to know that freedom is preserved, that true representation is maintained and that honor and justice are upheld. We see the supplant-

ing of the desire for free representative government by the desire for free, undisturbed chance for the getting of money—be the government free or fettered, representative or boss-ridden, owned as a sacred right or bartered. We see pictures on every hand of the subordinating of our institutions to commercial gain.

Have we, in the phrase of our beloved vernacular, made good—to our forefathers—to the world—to ourselves? We cannot say yes. We may not in trueness to the best that is in us say a final no. We must say, not yet. Then how may we? is one of the chief questions on this earth. Does all this seem to be a far cry from the opportunity of the teacher? It is not! It is the heart of the whole subject.

Our country had its origin in the minds of its people—of its great who led and its great who upheld them. Our country's strength, its principles, were in the purpose and in the hearts of its citizens. Its citizens of tomorrow are all in your hands.

Where, in any steps up in the march of mankind, has the teacher been absent? In the olden days he wore a cowl. He could only live within the church. With her protection only could he give the light that was in him. Today he needs no protection. He may teach there, too, but he need not. He has the arena of every schoolroom in this country. He has the ears of the attentive, listening multitudes, of our children—our best citizens, our citizens who are waiting only to be taught, to be led, to be inspired, to know their part as citizens of this country, in order to go forward to bear that part nobly. He has our whole body politic of the future America in his hands. He has it before the soil of selfish commericalism in its adult form has more than reached its ears, before the grip of materialism has it by the throat. He has it in the fresh morning of youth when dawn is there, when morning beams gleam, when vision is awakening and longing to open its eyes to fine, clear sights and sounds. Oh the squandering of human nature! that we let that morning so greatly slip by us, to have all its chances filled with sordidness, or left by neglect to the haphazard chance or mischance. What possession have we other than our human children that we treat so carelessly?

You have them. They are yours to redeem; and they are the only hope for the redeeming of our nation. Every child is a possibility. Not only the children whose parents help them to ideals, but every child has the divine spark and may be awakened to the ideals of those who founded our nation—aye, and perhaps higher. Each generation that is built should be built higher than the last. There is no hope that this country of ours may take the great ideals of its foundation and carry them to their highest destiny, except that the youth of the land be awakened, and catch the vision of principle, and of purpose, and of the endurance of hardship, privation and loss for principle, because of purpose—there is no hope but that the youth of the land be aroused to live that principle and that purpose.

They are waiting thruout the length and breadth of our country to catch the fires of principle and purpose from you—to catch the enthusiasm of principle and purpose that comes alone thru the daily work, the daily instruction—and, coming so, burns itself into the fiber of character that makes citizens. The youth of the land is in your hands. The redeeming, the salvation of our country, the molding of its future, rests largely with you.

Perhaps the greatest need today in the teacher's opportunity is to place the teacher's work on the plane where it innately belongs, as the most vital, the most difficult, and the most exalted work that is to be done for a people, requiring higher powers, intellectual and spiritual, than any other service for the community.

When we look back we think we have fallen away from a higher conception, which the world has held at times, of the power and dignity of teaching as a profession. We jump back to Greece and see how Plato and Aristotle molded the republic. We may recognize in the origin of the power and authority of the Roman church the natural deference to the conservers of learning, to the one teaching body. We may come nearer and take glances at modern Europe and see with sadness how much more valued there is the profession of teaching than in our own land.

But it is not backward nor to foreign shores that we need to look. From our own minds must come the light that will lead us. From within our own borders come the watchwords of William James, Francis Parker, John Dewey, and hosts of others, exalting teachers and teaching. It is forward that we must gaze, for we know that the world has never yet had a full view of the glorious possibilities of its dealings with its children. To see these means the vision of the dreamer in the trained mind of the educator, and to draw these from the clouds of vision or from the plans of the sage into the life of the child, means the teacher, with intuition, grasp, sympathy, force, and a heartful of love for the child, as well as a headful of training—and it means an army of them.

It would be a mistake to suppose that a nation could be built or that ours need be built wholly by the dictation of the profession to irresponsible parents. But it would be an equal mistake to think that a nation can grow aright if all of the child's real self is left to the parents for development by irresponsible teachers.

Co-operation between teachers and parents—leadership of the parents by the teachers, when they need leading—is the only way in which our youth can be brought to their best.

When parents have the right attitude toward their children they are the natural, rightful leaders, and must go hand in hand with the work of education. But when parents are day by day undoing a teacher's best work, are steadily vitiating the work of education by a wholly harmful attitude, it sometimes seems as if the teacher should have the power to

discipline them! A schoolmaster said to me once in despair that he could make his school a good one if he could turn it into an orphan asylum!

There is another deeper reason why parents and teachers must co-operate. The parents who make the teacher long for an orphan asylum are the parents who are probably alienating as well as spoiling their children year by year, and in the end the tragedy of a severed relation will occur. This relation must be saved if possible, even by the teacher.

In our country, with our tremendous influx of foreign population, there are causes severing parents and children that are due not to unwisdom but to the division created by the new acquirements of the younger generation. The school is the flowing stream where the past and present may unite for our incoming citizens. The parent and the teacher must work together. But in the last analysis, must not the high light come to education from you who have knelt at that shrine in dedicating yourself to a lifework? Must the whole country not ask of you help, inspiration, and leadership, ideas which shall permeate the whole community in what should be our chief concern—the development of our youth?

This is, of a truth, a high calling, a mighty opportunity: to re-create the lives of individuals; to influence the life of a nation; to build the nation of the next generation; to help to create out of the present a better future; to demand and hold the attention of our country by inspiration, by entreaty, or if need be by the authority of purpose and determination to its highest duty, its greatest privilege, the concentration of all our forces, material and immaterial, on bringing the education of our children to the highest point that science and inspiration can show us.

This is the work of teachers, of prophets, of seers. Are they not synonymous? For you cannot teach unless you try to see and you cannot see unless you keep searching the sky. This is the work of a mission, and it can only be done in the spirit of a mission.

When Mrs. Young gave me the invitation to come and speak to you here today, the sense of inadequacy and lack of very much contribution to give you tried to hold me back. But it was of no avail—the grip of the teachers would not let me go. The chance of trying to add something to these counsels held me.

For years I had thought a great deal about teachers and teaching. I had come to the thought wholly from the standpoint of how teaching could best be done, and all the teachers whom I have had the happiness to know had looked at the question from that angle. Once a long time ago an incident happened to me which showed me teaching from another standpoint with a vividness of contrast that I can never forget. Just as I was in the full tide of the fervor of the thought of teaching for teaching's sake, for children's sake, there came to me—I cannot now tell you how or from where, the detail is gone; I retain only the vivid memory of the great revulsion of feeling that struck me—there came thru the press, the report of a discussion of teachers' rights

to retain jobs—a discussion that had no relation to the performance or the fitness of the teacher, no relation to the children; a discussion that treated a teacher's position on the same basis as any commodity, a ton of coal or a pound of floor; on the same basis as any daily job, shoveling the coal or baking the flour, and demanded that when a teacher had once acquired it, no matter how, no one should steal it from her—quite on the idea that the only question in her losing her job was her loss of her pocketbook.

This presentation of the question, unrelated to any consideration save that of gain, was a distinct shock. My mind grew hot at the idea, my spirit groaned inwardly, and I remember thinking helplessly: Would it ever be possible to try to tell teachers how that idea perverts their divine calling? Would it ever be possible to try to present the cause of true teaching in such a light that commercialism could not in that light retain on it even a faint grasp?—to show that tho the means of living may be considered fair game, this bird is too sacred to be shot?—to show that the finest beauty of the teaching profession is that it is not held primarily for the teacher but primarily for the child?

I fear that the intense longing of that moment is partly responsible for your being committed to listen to me today, for when the invitation came to speak to this great body on teaching I could not say no.

That particular idea, of a divine work dealt with as a money value, is the idea, thank God, that starts revolutions. When it became clear enough in his opinion to Martin Luther that the church of that day was trading in divinities, his protest started a new church. When a like era came, in some men's minds, in the Church of England, and it felt to some that places were being fattened by the church, livings parceled out, instead of souls saved, the same thing happened—a new move toward the spiritual meaning of the church's work. And it will ever be so. When churches seem to loss their high interpretation other churches will arise.

The human spirit soars. It must in the end do its highest work nobly. No work done for the human race is higher than the work of bringing its children into their own heritage—possession of themselves and of the world thru education.

When American schools hold the chance to perform this high service as a commercial job, there will be a revolution.

But they will not—they cannot. The terms even of that discussion do not truly mean that in its full sense. Let us not use the terms, then, lest they might mislead even one. Let us instead fling wide the other idea. I would like to have teachers write into their contracts a clause to the effect that when anyone can be found to do the work better, that one should be placed there instead—this only to have all concerned sign and seal to the high altar at which that service is offered. The teacher is a priest and humanity is the altar and there is but one test for the continuance of the relation—that it is a service to humanity.

There are two sides to the money question in teaching.

One side is given us from our great book: "You cannot serve God and Mammon." If the uplifting of the child is the aim of teaching, the money cannot be. Therefore the money must not be, cannot be, the aim of teaching.

The other side is that for the highest service nothing is too high. It is the community's failure to grasp the significance and value of teaching which leaves to teachers' efforts the proper valuation of their work. It is the community that must see that heights are reached in the recompense for this high work. Under the economic conditions of today, a man's or a woman's first duty is to self-support. A still higher duty calls on the earning capacity of the individual. A teacher may not squander the lives of others even if he would his own. And it becomes the duty of the community that accepts the unbounded gift of the teacher to see that no such predicament is presented to one who, fitted to that great task, throws his soul and his life into teaching. The community will come to—not conceed—but demand, money payment for the work of teaching commensurate with the payment of the highest experts in any field. It needs but the conception of the community of what it must have for its children, of what it must give to its children and of how highly it must rate those who are making their lives—in the rating of earning power as well as of esteem and of gratitude. To reach this conception, it is you who must help to show the truth.

That truth can never come out of the spirit of exaction. It will come only out of the spirit of devotion, the spirit that would find a happiness in making ends meet for the sake of a cause, that would find a beauty in economy for the sake of something higher than material goods. The spirit that would cast oneself in to the extent that one could, with joy in the casting, will send beams—has sent beams—shining thru our country; beams of light that are bringing on the dawn of our higher education. To put the teachers of America's sons and daughters on this plane of devotion I should call one of the greatest opportunities on the earth today. Without the spirit of the teacher, no pedagogy, no methods, no plans can be built to succeed. With the great army of America's teachers all moving as on a mission, half the battle of the future is won.

The other half concerns the questions: What shall we teach? How shall we teach? My great quarrel with education today, speaking generally, is that those questions are taken so largely in their narrow sense and answered usually from a narrow view: What shall we afford pupils as accomplishments? and how shall we do it to make the accomplishments stick?

These lines of thought do not to my mind touch the first principles of education, and when so much as that is discussed and settled, the real question has not yet begun nor been broached. The prime question is:

What are we doing to develop the natures of the children? How may we do to bring them to their highest point of character and usefulness to the community?

Curricula may come and go, may vary in various communities and climes; methods may be tried and discarded and all the while improved as one tries out tools; all without deviating a hair's breadth from the main point aimed at, if the great underlying purpose goes on forever and is ever present. But when discussions and decisions on these lesser issues have no relation to the harbor to reach, the ship seems rudderless and tossing on the seas.

In this realm, education has been handicapped by having some set harbors which it must reach in its curriculum. The college sets a narrow door thru which all pupils must go, and the business man sets other standards as arbitrary and as necessary. Then both make outcry that the schools do not meet their particular demands with efficiency. Any work attempted without efficiency does harm to the pupil. That goes without saying. It is as necessary to teaching as breath is to life.

But I make outcry that their questions touch but the tenth part of teaching and that they are almost the only questions asked by the community in general, and that in meeting these questions the real fundamental questions of school work are lost.

It is hardly ever asked of the schools whether they are preparing clearer, keener, and more efficient voters and workers for the State. This is the first business of the schools of the country, and it receives but little attention from the public who constitute themselves the schools' critics, but who must be led instead to see the greatest values and real responsibilities of the school.

Citizenship means the rounded development of character supported by powers of the mind. It is for this goal that we must steer all our courses, and our success in reaching it thru our education must be our one final test of its success. Have we reached it? Have we succeeded in our great system of education?

We say we have not yet made good as Americans. Let us take a glance at the pre-eminent shortcomings that hinder us and see if they have for us indications wherein our educational system may be at fault. What are the root qualities to which should be ascribed any failure of our country to make good as yet to its beginnings? Or, to put it differently, and not to view the progress of our country always with a backward glance: What are the qualities in us which seem to be endangering our progress toward our highest goal? The mind's eye runs over the high points of our national shortcomings. We find three great avenues of weakness:

First, the inadequacy of our government. The best people are not always sought to fill our offices; the current methods are bungling in many directions; the right compensation for service to the community is little

thought of; the subjects needing governmental care are many of them neglected; the governmental machinery is left to be used or abused by any who will. And under these conditions our leading citizens are pursuing their own way with few thoughts given to their duties as citizens, and those few weak enough to be stifled in hopelessness! The lack of responsibility of our most responsible people on this subject is an amazing fact today!

Next, we are appalled by the utter thoughtlessness and carelessness for any and all conditions for others of so many of our money-makers in their mad rush for wealth; the general acceptance of the theory, "the Devil take the hindmost"—the naïve question, "Am I my brother's keeper?" and the wonder that it should seriously be considered that one man could think of the welfare of another while they work under the divine law of competition. These mean a deep lack of any true sense of the meaning of citizenship. They bode ill for the harmonious and real solution of the questions appearing with such vast moment in our country between so-called capital and so-called labor. They bode ill for that real democracy which in its greater, deeper unity of man working for man, makes null and void any such paltry division of people.

And again, we are confronted by the general lack of discipline and regard for law. Out of this glance there stand out two monsters that glare thru it all so fiercely that we are driven to call them the leading spirits in our weaknesses—materialism and selfish ambition.

The actors on our stage today were once children. The leaders of our civilization were once in the nursery and in the schoolroom. If they are making mistakes in their leading, if they and those they lead are being dominated by materialism and selfish ambition, it is fair to ask of their training. It is true that training and influence cannot anticipate nor prepare for all conditions. It is probable that the unwonted success of American industry, of American enterprise, has gone to the American head, and that in the conditions confronting adults come the causes of the shortcomings. But is not the purpose of training, the meeting of adult conditions? Home and school must join hands in the search for the responsibility of an unsatisfactory national attitude. But I should like to see the school seek the greater part of the responsibility in its eagerness to emanate a clearer light.

Lack of responsibility in the government and for the government. Is our school system likely to fortify its growing citizens against this deadly evil which, just so far as it exists, must be striking at the very root of our national life? Responsibility is of a surety the first quality that the right school life must develop. Yet I cannot see, as I think over schools in general with their red-tape methods of discipline, that responsibility, that finest flower of the right disciplinary relation between pupil and teacher, has very much chance for consideration or for growth.

Thoughtlessness and carelessness for others in all the relations of life. Does the school system plan that this weed shall be early uprooted and be

supplanted by the beauty of always considering others? How can we even talk of supposing that we are arousing in our education a civic sense of caring for the whole, when the fundamental basis of the plan of school achievement is for each pupil to get out all he can for himself regardless of, or even essentially against, all comers; when the basic idea in every recitation and in every course of study and in every department, is to shine—if possible, ahead of others; and when all the marks and ratings are on this plan? It is ingrained in the whole system. How can we wonder, then, if later in life these same citizens in pulling out their plums, care nothing for the size of the other fellow's and never even imagine dividing up?

Regardlessness for law! Is our school system building up in our youth a fine, high regard for law? I fear that the view of the school system is limited to its need for having its own laws observed instead of thru them developing a regard for law in its pupils; and I fear that the easy methods to accomplish this are usually resorted to—the threat and infliction of petty penalties and the offer of petty bribes—which place the law-keeping on such a shallow basis, that it almost makes the enterprise, so often undertaken by the high-spirited youth, of breaking the law and escaping the penalty, the dignified thing that it seems to him. We cannot suppose that a police system consisting of bribes and penalties is going to affect the character of the pupil except to disregard laws so artificially related to him. Unless we can get the kind of interest in the laws that he will have if he helps to make them, I do not see that we are really making him deeply appreciative of law.

Materialism! The only antidote for materialism is, to be filled with an idealism. Does our school system place before all teachers always that their great work is to develop souls? Is that the keynote of our educational idea? If not, how can we wonder at a materialistic outcome for these individuals who are in our schools in the germ? I fear that the school has been on a more or less factory-like basis—taking in raw material and turning out product, of thinking and counting machines. I fear that the school has shirked its share in the finer side, the spirit part, the character of the children.

Selfish ambition! It would be absurdity even to ask whether our school system is shaped to eradicate selfish ambition. I must think that the selfish ambition of the American is more than a result of the neglect of the schools. I must think that, however unknowingly, we are carefully developing selfish ambition in the school life of our children. We have not deliberately set forth to do this. We have not said we will create the type of citizen who will prey upon his kind ruthlessly for his own advantage. We have not prepared courses of study with this end in view. We have not erected this picture of the ideal American to work toward as an achievement. But the fact remains that we greatly achieve it. The thing has come differently. We are caught by the system. The demands of the

community, of certain specified results of the thinking-machine type, seem necessary to meet. The educational proposition has been too big for us. The very mass of it is overpowering. We have not had time to stop and think just what our main aim should be. To meet the community's demands and carry on the ordinary routine business of running our vast network of schools has been all that we could do. To produce the results we must have a strong leverage of some sort on the pupils—a powerful principle that will work.

Self-interest is an easy one—oh, so ready to hand. Mankind is in the delusion that the only way to do anything is by downing someone else. With its fine lack of reason it holds up the other way as the most worthy and to be admired and fiercely practices all the while the cut-throat principle. The general acceptance of the competitive idea as the only workable basis for any achievement presses closely from every side on the schools. We shut our eyes and grasp this tool of selfishness. We take this little inborn seed and assiduously cultivate it from the first year of school to the last and by its aid attain certain results we point to with satisfaction. We smile sadly at moments, and sympathetically, at the unfortunate elements of human nature, and go on sublimely cultivating them just the same. At the end we send forth products to wrestle with these same carefully and successfully cultivated qualities of selfishness and, with or without the aid of churches, to undo the work just as far as possible if they may hope for salvation. And then we wonder that, as we look about us, at the civilization these results are poured out into, we find a self-centered civilization—a civilization on the whole, keyed to the note of selfish ambition, not much minding whether its success spells ruin to others, not questioning whether the good to it is the good to the whole, rather pluming itself than otherwise that its credit marks mean marks over some less favored.

We must face the fact that our schools are the hot-bed of our civilization, with its faults, and when we find a question at the end, we must come back with the question to the beginning. We must free our minds of this clutch of circumstance and stand and look and think and intelligently plan. You must come where, whatever the community may say to you, you will say to it that it must listen while you deliver to it the high policies that must prevail in the elevation of its youth, if you take your part in that epoch-making process which is education.

Here, then, is the culmination of the teacher's opportunity: To create the teaching process that will make the citizen of the future. He must be responsible—not passively but actively; an integer in the formation of the state—seeking and acquiring the training that will make him an intelligent civic force. His citizenship must be based on principle and on an ideal. His principle and ideal must lead him to sacrifice himself for them. His privilege that he seeks must be the privilege of serving. And his powers must be enlarged to make these qualities effective.

This citizen of the future cannot be without the co-operation of the home and the school in his formation. The home cannot alone bring this to pass thruout the land. The school must lead the way.

What kind of a school of the future, then, can lead the way to this citizenship? First and foremost, every school for teachers must be a school of the prophets, and every school in the country must catch that spirit. This school of the future must be a vital force in the community—not holding itself apart in a remote territory, but sharing in all phases of community life. It must be ready to play a leading part, ready to be a correctional force, if necessary, where youth is concerned, by inspiration and suggestion. Its home should be the home of the community. Its influence should be that of a friend, and there should be no community interest that might not find there its rightful arena for expression. The education of the school of the future must be based on the principle of citizenship. Its intellectual work must be based on the scientific principles of teaching. It must never rest on principles or on work achieved, but must be ever setting its face to discover new truths. The school that will bring to the world the kind of citizens that alone make the hope of the world must be ready to lay down the law when need be. It should refuse to assume care of so much of the lifetime of the youth of a nation, to be so large a factor in the lives of children as it is, unless it may hold the crucial elements in the development of children to be its first responsibility. It should refuse to carry on its work of the construction of human beings, under conditions in which it is impossible to fulfill that sacred work. No teacher can be rightly responsible for fifty children! The school must be more fully manned. The school must make the leaders of our nation listen, must make the financiers of our country take heed, to see that the resources for the financing of our greatest national work are amply provided.

What are battleships, what are Panama canals, what are land-ways or water-ways in comparison with our children? What a shortsighted, ignorant people we are, with our eyes so fastened on the ground and our own next petty step that we lose all sight of the day that this dawn of youth means!

It is the schools that must awake us to the prime need above all other needs, to the prime joy above all other joys, of placing our children where they, at least, have all wise gifts to make them men and women.

This school of the future must take great note of the physical well-being of our children. We are chargeable in America by most of the other nations of the civilized world with neglect on this score. It must not be. We must build for a stronger race physically than we yet have, and we must build while it is yet young.

This school must put its intellectual work on the basis of the highest science, and this it must do with the highest efficiency. It must keep abreast with all established discoveries. It must hold its achievement in that realm to be the development of thinking power, not the cramming of fact; of judgment, not of imitation; of action rather than of memory.

But above all, this school of the future must hold the character which is the result of its education as its first thought. It must seek to develop the will and not the mere tendency to follow a rule. It must cultivate self-control, and not a submission that is a result of any rod. It must make to grow an independence and individuality of character that will not submit itself to the copying of false or of arbitrary standards. It must cultivate variety rather than conformity. It must create a demand in that individual for thoughts rather than for things. In this school it will be deemed no more possible to appeal to selfishness, as a motive power for work, than to develop smallpox or measles, for some ulterior purpose. Punishment will disappear as a threat or a menace, reward will disappear as a bribe, and it will be of no moment that one excels over another. The only point of excellence will be to excel over oneself. Ambition of the selfish sort will be wiped out, and only the rightful, rational ambition to do one's best will be left in its place. Competition will be relegated to the field of sports—rivalry for amusement! To try seriously to get ahead of a co-pupil, will be such an insignificant and out-of-date idea as to command no attention whatever. Co-operation will reign in the place of competition and mutual achievement be the thing to note—each contributing his share and that share growing ever better and better. It will be an ignoble thing to note or count whose share is the largest. The only fact to make sure will be that one's own share grows larger with one's growing powers!

In this school the teacher will hold ever before the pupil an ideal which is constantly acting on his higher nature, in great moments and in small, so that his mind and his spirit are moving instinctively toward that ideal as a flower turns toward the sun. This ideal will so dominate the whole realm of work that it will itself grow to be a part of every individual, and that ideal will be the best in every individual, and it will move toward all the greatness that is in the world.

In this school the fundamental principle of growth will be, as it is in truth, the prime law on which all things are based. The misleading will-o'-the-wisp called "finishing"—that falsehood masquerading as a principle—will be banished, and the school itself, and all persons in it, teachers and pupils alike, will walk forward in a great progress of growth, never finishing but always like all things in the world, going higher.

And so this school will not be a factory but a garden. And in this garden will always be a playground, and in that playground will be the best of all the education—pure joy.

How sublime is the teacher's opportunity! On our great American public-school system to build out of the past the school of the future. To bring from its portals citizens, not to fit society, but from their great qualities, to make society; to re-create and uplift a nation.

The need is great. The opportunity is golden.

THE DEVELOPMENT OF PERSONALITY THRU EDUCATION

MARGARET E. SCHALLENBERGER, PRINCIPAL OF TRAINING DEPARTMENT, STATE NORMAL SCHOOL, SAN JOSE, CAL.

Subtle, illusive, unanalyzable, and indefinable as personality is, it has nevertheless thruout all the ages maintained a supremacy as one of the most potent factors in life. No one will deny that equally and sometimes far more telling than the truths set forth by leaders in politics, science, art, letters, or religion have been the influence, the power, the persuasiveness, the indescribable charm of their personalities. On the other hand, many a royal truth has failed to obtain recognition because there was no "power behind the throne." To be sure, conditions sometimes seem to force comparatively weak personalities into prominence, providing opportunities which they have only to grasp; yet, after all, it requires a certain amount of insight to be able even to see an opportunity, and weak personalities do not possess this insight. Who does not appreciate Edward Rowland Sill's wonderful poem?

OPPORTUNITY

This I beheld, or dreamed it in a dream:
There spread a cloud of dust along a plain;
And underneath the cloud, or in it, raged
A furious battle, and men yelled, and swords
Shocked upon swords and shields. A prince's banner
Wavered, then staggered backward, hemmed by foes.
A craven hung along the battle's edge,
And thought, "Had I a sword of keener steel—
That blue blade that the king's son bears—but this
Blunt thing—!" he snapt and flung it from his hand,
And lowering crept away and left the field.
Then came the king's son, wounded, sore bestead,
And weaponless, and saw the broken sword,
Hilt-buried in the dry and trodden sand,
And ran and snatched it, and with battle-shout
Lifted afresh he hewed his enemy down,
And saved a great cause on that heroic day.

It has always seemed as if the king's son represented the royal result of true education. He could see wonderful possibilities where the common soldier saw—nothing. This ability gave him hope, made him strong and brave and noble, a great personality; while ignorance played no small part in the cowardly, despicable action of the craven. If he had only known the latent possibilities in a properly wielded piece of blunt steel, would it have made a difference? In other words, could that coward, even with inherited tendencies toward cowardice, have been saved thru education the ignominy of such a climax? Could his personality directly trained in boyhood have been so changed as to have produced a keen-sighted, clear-headed, optimistic, generous-spirited, loyal, brave personality

instead of a foolish, pessimistic, envious, disloyal, unhappy, cowardly one? Is personality a fixed, static condition of human life, or is it amenable to education? Possibly the question might be more interesting if it were made personal. Let each of us then ask, "What sort of personality might I have been now had my education, up to today, been—very different?" Or we might each imagine, "What sort of teachers and environment should I have had in my childhood, girlhood or boyhood, and early womanhood or manhood in order to have made of me the strongest, most charming, and most effective personality possible?" It may be that each of us, even the most retiring, is possessed of a goodly amount of egotism. Certain it is that we all feel confident if our education has been wiser, and if some of the conditions of environment, susceptible to change, had been improved we might each one have been healthier, or heartier, or happier, more gentle, more kind, and more studious, more musical or artistic, more witty, more wise, or more noble—more something which we very well know we are not.

Plato's shadow-world is no myth. In every human being there lurk vague longings, stunted ambitions, dead hopes, unrealized ideals, both intellectual and ethical, which education has but crudely touched or has utterly neglected or abandoned. Every life is more or less of a tragedy in that no self is its best possible self, and largely because no self has been given a chance to be its best self. This is wrong. The adult world owes to the child world not only the discovery of what the child's potentialities are, but also what might be called the imaginary realization of each child's most perfect future self; and conditions of education should tend to make both the discovery and the realization possible. What sort of personality can the child attain? What part ought education to play in its development?

One big step in the right direction has been taken. Notwithstanding the insistent and continued demand for simplicity and thoroness in education as opposed to multiplicity of experiences, of necessity somewhat superficial, there is more and more reason advanced for variety of educational stimuli, first, in order to discover natural tendency, and secondly, because the wise teacher, knowing how early a tendency may atrophy, does not dare deprive a human being of a chance to exercise his mind upon what later may become a dominant characteristic of his personality. Those of us, e.g., who for lack of opportunity to exercise the ability young enough have lost all desire to play a musical instrument, to learn a foreign language, to be interested in any form of science, or to see the beauty in a gorgeous sunset, can bear witness to the unpleasant and weakening effect such mistakes have had upon our life equipment and interest, to the limitations that have been established in our personalities thru a narrow tho perhaps extremely thoro education. And not only directly as a means of mere intellectual gymnastics is this wealth of experiences necessary, but also

on account of the possible effect of some special stimulus upon the emotional life. The boy who the teacher says can neither read, write, nor spell, but who can, even tho it be in the most execrable English, hold the attention and win the respect of his more scholarly classmates by his lucid explanation of wireless telegraphy, is an absolutely different boy from that time on forever. His superior knowledge and its recognized value among other educative values have given rise to hopes, courage, patience, ambition, self-respect, determination, and happiness, where before were to be found only discouragement, hopelessness, degradation, and despondency. Compare the method, too, of obtaining this result to that of a systematic course of lectures or sermons upon conduct. Education should give to the so-called dull child not advice, not rules and memorized precepts, not even habits and right desires, so much as *a chance to gain the strength that just comes with the joy of success;* for with this joy not only are new emotions called into action, but what is far more to the purpose, a new personality is born into the world.

"Allow me to introduce you to a new pupil," said a teacher in one of our grammar schools to the principal, as she presented a neatly dressed, washed, combed, and brushed youth. "A new boy, indeed," replied the principal. "How do you account for it, Joe?" "I never knew I was worth scrubbing, sir, till last week, when the fellows say I won the debate for our side (the affirmative), on the question—we chose it ourselves—Resolved, that girls are worth more to boys in our system of co-education than boys are to girls. It's the first time I ever had a chance at anything like that, and I thought I'd make a white mark of myself, so's to remember I could score above 60 per cent in something." Let the early years, then, of childhood be filled to overflowing with selected and varied experiences. There is no telling in which one some smothered spark of human power may burst into living flame.

Another notable change steadily growing in favor is the attempt to make school life more informal and natural. When this attempt becomes a reality, then will "a great cause" have been saved. So long as we think of education as that which gives knowledge, or skill, or habits, so long as we separate it from the special personalities which it is its function to produce, or at least to render possible, just so long shall we lose sight of the essential efficacy of education and continue to speak of a well-educated man with a most disagreeable or non-effective personality. Education used in this sense is entirely too narrow; it includes all that goes toward making a man or woman wise, active, efficient, lovable. A man's education is literally a part of himself. This is not always understood. So gradually do our experiences come to many of us, after school days are over, and so slowly do they work changes, that we fail to recognize how radically different we may be from the person who bore our name twenty years ago. To the college graduate, who has lived rapidly for four years, who has received during this

short period hundreds of new impressions, who has parted, on the other hand, with hosts of cherished ideas, the truth is made more apparent. When he takes his place in the world again he is often filled with surprise, sometimes with dismay, at the opinions he is supposed to hold and the measures he is expected to advocate. He looks out upon the world with new eyes. He knows that he is another personality and feels embarrassed for a while, as if he were sailing under false colors, until there is adjustment to this new condition. As a rule, liberal training tends to make modest, forceful, fair-minded, wise men and women. It is certainly a telling education and it does what it can surprisingly successfully, at this period of life, to supply material sufficiently nourishing to destroy all appetite for what is foolish, narrow, petty, or mean. There is a charming simplicity, too, a directness, a frank, child-like attitude in such a man, that means a more attractive as well as a greater personality.

But aside from arranging the school curriculum so as to give the child as many educative experiences as possible, and in addition to this, placing him in conditions as nearly like those he will meet in the outer world during his child life as may be, we ought also to keep always directly in mind the fact that there are certain definite demands made by society which the school almost totally ignores. One of these is the insistence upon gentle manners. A personality whose leading characteristic is a nice regard for the welfare of others, expressed gracefully and unobtrusively, is possessed of a power quite as effective as great learning, while great learning plus a sympathetic, gentle conduct is almost irresistible. The world is divided into three great classes: those who possess noticeably good manners, those who possess noticeably bad manners, and those who have no manners. Most people have no manners. They are not specially rude or boorish, but they are not thoughtful about the comfort of others, and it never occurs to them to say or do things in a gentle way. If we were to list the forms of polite expression current in our schools, they would narrow themselves to "excuse me," "if you please," "thank you," and—not very many more. And how often—i.e., in how many different ways—is opportunity given for even these few little polite remarks to be made? Moreover, the common courtesies of life, that act like magic upon high-spirited, nervous American boys and girls, do not occur nearly often enough. If more time were spent in outlining plans whereby courteous actions could naturally find expression, even at the expense of knowledge itself, surely we might send out pleasanter if less learned personalities. The world would get more from them and they would appreciate and enjoy the world better. It is curious how obtuse people are about this matter of manners. A mother who was urged to pay a little more attention in this respect to her small boy said, with tears in her eyes, "I do try to do my duty by him. He sets by me at the table and I holler and holler at him, trying to make him eat nice."

We teachers might ask ourselves profitably to which of the three classes

we belong. Not all teachers, at least, can be ranked in the first class, as the following anecdotes testify. A little girl looked up innocently into the face of a new teacher, whose gentle ways were a surprise to her, saying, "What makes you talk polite and say, 'I beg your pardon' and everything? You don't have to. You are a teacher." And this one is even more striking: A teacher visiting in a home last summer had not spoken of her profession for several days, when suddenly the eight-year-old boy of the family discovered it and said to her, his eyes wide open with astonishment, "Why, I didn't know you were a teacher. I thought you were a lady." It is easy to see how a child may gain this impression. The teacher's life is a life of leadership, and perhaps too much of it is spent in the exercise of authority; kindly, possibly, but rather crudely, expressed. Without the aid of social forms of etiquette she easily acquires other methods, effective, certainly, but not charming. And the boys and girls being educated by her, likewise minus social forms of etiquette, grow up without one of the greatest aids to human success—just plain, good manners.

Again, the school as an educative institution has never taken seriously the education of a sense of humor. In fact, it has done a good deal to kill at birth any incipient tendency in this direction. I once heard Homer Davenport, the noted cartoonist, say that he had attained the ability which has made him somewhat famous, in spite of and not because of the American school system. Every funny picture he drew as a boy in school was sketched surreptitiously and he was subject to punishment according to the degree of mirth the picture was able to arouse. Every effort was made to induce him to stop such foolishness and to settle down to "real work." A small boy with a gentle, unobtrusive, rather retiring disposition was sent from the classroom the other day, because, in observing the thousand-legged worm, he remarked that he was glad he was not tailor to this particular species of legdom, as it would take a very long time to make so many pairs of trousers. The teacher had no sense of humor. In all earnestness, is there a characteristic in any personality more attractive, more winning, more deserving of cultivation than a sense of humor? It is susceptible of cultivation and is at least deserving of appreciation, when it shoots into life all unexpectedly and innocently, bright and sparkling as a shining star.

Personality thru education! The phrase does lend dignity to the word, education. What is there in each boy or girl that is most worthy of special development? What seems to need most strengthening? How is the child impressing his fellows, his superiors, his inferiors, younger children, adults? Above all things let education bring about a personality, not a pale gray shadow of one. Let something worth while be its dominant characteristic. Let opportunity be given for this something to act in a sufficient number of ways and under sufficiently varied conditions for it to "strike in." The something may be any one among hundreds of possi-

bilities, e.g., a sweet, strong voice, a firm, graceful poise or walk, love of poetry, interest in athletics, or art, or music, or letters, or history, or some form of science, a fine sense of honor, generosity, business ability, warm sympathy, a nice tact, gentle manners, neatness, order, personal cleanliness, punctuality, love of plant life, of animals, fairmindedness, courage, perseverance, a certain vivacity or sparkle that inspires, downright kindness of heart, musical or artistic or linguistic talent, taste in dress, ability to cook or sew, to arrange flowers, to nurse, executive ability, a sense of humor, self-respect, strong will, sincerity—any characteristic that will lend itself to educational influence, that tends to make life stronger or better or more beautiful. For what shall it profit if we educate minds and not men?

THE COMPENSATION OF TEACHERS

JOSEPH SCOTT, PRESIDENT OF THE BOARD OF EDUCATION, LOS ANGELES, CAL.

The subject of my address will probably excite in the minds of some of you the idea that I am to refer to that phase of the compensation for teachers which is discussed by the idealist and the spiritually inclined and by the people who dislike to look at this question from a business standpoint. I presume all of you have had such phases of the subject presented to you in a more or less earnest way many times, but it is my purpose tonight to beg your indulgence for a few moments while I discuss, tho it may horrify some of you, the commercial side of this question.

Teaching is a profession, calling not only for a vocation to fulfill its best purposes, but likewise a grade of intellect and knowledge which can be adequately compensated elsewhere if the financial inducements do not exist in the teaching system.

I take it there are two ways in which public services can be rendered: One is along purely patriotic and public-spirited lines where the glory of achievement and benefits that will come to your fellow-citizens as a result of your efforts make the field attractive to those of you who can financially afford to donate your services. The other has reference to that very large class of public business, requiring business treatment, business methods, and business salaries.

It has been my privilege to be identified with the Board of Education of Los Angeles city for the last seven years. I have been elected to that office on three occasions, being now president of the board for the fifth annual term. There is no salary attached to membership on the board and therefore my motives in raising the financial question here should be free from sinister criticism.

I was amazed early in my experience on the Los Angeles School Board to note that when there was a question of curtailing expenses in the department the first place where it was felt the pruning knife should be used was in the salaries of teachers. I came to find on investigation that the

salaries of teachers were absolutely out of proportion to their cost of living and to the long ordeal of training and education necessary to fit them for their professional work. It was also observed by me that our unwritten law required every candidate for admission to our School Department for teacher to be under the age of forty-five years, which forced upon me the conclusion that in the judgment of those undertaking to profess to know, the teacher had outlived his usefulness at a time when other devotees of other professions were in the prime of their faculties and in the highest sphere of their usefulness.

It is generally conceded that the business side of teaching has not as a general rule appealed very much to the average school board or tax-payer. I find two reasons largely governing the motives of school boards in keeping salaries at such a low figure: first, the fear of exciting the condemnation of the tax-payer and citizens generally at what might be regarded as extravagance if salaries were raised; and, secondly, the subservient and diffident attitude of the teachers themselves, who dislike to present their views to the board for fear of incurring more or less drastic disciplinary treatment.

I am frank to state that we have tested in the city of Los Angeles the first objection and found it to be without foundation in fact. The average parent today, I believe, is beginning to realize that the school is not only taking away from fathers and mothers the burden of training the mind of the child, but it is also undertaking to give the boy and girl such training in personal hygiene and physical culture that the duty of the parent in that regard can be almost ignored; in addition to which, I am happy to say, there is creeping into the system of education some observance of the highest form of education, to wit, the development of moral character, and therefore the average parent who has a particle of consideration of his own responsibility is feeling more or less grateful to the teacher who is so marvelously relieving him of this burden and in a way by which he himself could not possibly expect to accomplish the same results.

In the city of Los Angeles we are steadily raising the salaries of teachers, and furthermore we find no adverse comment either at the polls or in any other outward expression of sentiment. Of course, our Board of Education is non-partisan, is wholly removed from politics and political purposes, and is trying to conduct the department so far as the teacher is concerned on the basis of merit alone. Mutual sympathy naturally results from our attitude toward the teachers and the Board of Education finds its relations to the teaching staff of the department most pleasant and agreeable. Unfortunately, however, we now find ourselves confronted with the proposition that whatever we may do to maintain the principle of the importance to education of adequate compensation, yet it is a most extremely difficult, if not hopeless, task to sustain such a position if we do not meet with co-operation thruout the country.

It is no benefit to our proposed determination to increase teachers' salaries if we are to be swamped in Los Angeles with statistics from other cities tending to show that teachers elsewhere are willing to submit to much smaller salaries and appear to be complacent therewith, which, of course, renders us liable to the charge of extravagance. Hence I have the effrontery to appear here today and to suggest to this great body of teachers from all sections of the country that it behooves the National Education Association to take cognizance of this question by setting the stamp of its approval upon the policy of making the compensation adequate for the services rendered. Every other profession has its commercial side. Speaking as a lawyer and as a member of my profession, I would be ashamed to say that I was indifferent to the commercial side of my work. I owe responsibility to my family and to myself that can only be confronted along financial lines. The teacher is similarly situated and is entitled to be free from domestic troubles and the gaunt phantom of a penniless old age and to be reassured with the hope that she is working at such a rate of compensation that she can lay aside enough for the proverbial rainy day, when under her own little rooftree, free from mortgage of any kind, she can have an income sufficient to protect herself and those dear to her who are dependent upon her for support.

I am glad to take this opportunity to extend my greetings on behalf of the Los Angeles School Department to you all and to express the hope that after satisfying yourself with the beauty and charm of this wonderful city of San Francisco, rebuilt from its ashes, you will come down to the sunshine and flowers of southern California and see what we are trying to do with the help of bounteous nature for the children of that part of California—a country which has been truly called the "natural playground of America."

THE LIFE OF THE TEACHER

CHARLES ZUEBLIN, BOSTON, MASS.

The legacy of the nineteenth century is threefold: industrial organization, the democratic spirit, the cosmic sense. The modern world is organized on a large scale; the intense personal industry and life of earlier days have yielded to the impersonal life of the industrial revolution. Industry is subdivided, the processes of distribution are gigantic; we deal in a world-market. Comforts multiply, the humblest demand conveniences, the standard of living has risen, but capital controls our lives. We are the beneficiaries of a benevolent feudalism, which is tainted with the malevolence of misguided mastery. Nevertheless, the democratic spirit pervades increasingly all our institutions. We have not yet learned to organize it; we are fearful of our privileges, but we are learning that aristocracy spells decay. The larger life is due chiefly to the revelations

in the nineteenth century of the cosmic sense. The fifteenth-century world of the discoverers was but the promise of the unfolding universe of nineteenth-century vision. Humanity, the world, the universe, and God, have a larger meaning because of scientific discoveries. God is no longer a magnified man looking down on his insignificant creatures; God is in his world and of it. It is all one.

These three great contributions of the past century are reflected in the three-fold educational ideal: education for occupation, education for citizenship, education for character. We can have no adequate organization of the life of humanity until the citizen is a worker and the worker a citizen. The waking hours of most Americans are given to the economic struggle, the vast majority being manual workers, driven by necessity, and finding their occupations by accident. Hence, manual and technical training and vocational courses and bureaus! At last we are awakening to the fact that most children have no time for classical culture and the majority have hitherto received no immediate preparation for their probable callings. The good worker is not necessarily and spontaneously an intelligent citizen. He must be trained, and that by experience in the self-governing school. Not textbooks on civics, but observation of political bodies and the government of oneself, are demands of citizenship. The training for manhood and womanhood may be given by courses of moral instruction, or the insistence on good workmanship, or the inspiration of the teacher, but education is futile unless it embraces character. Ethical instruction, long neglected or supposed to be furnished by alleged religious teaching, is demanded in the twentieth-century school. Public and social problems will need exposition by word of mouth or book, but individual morality will doubtless be most satisfactorily acquired by the exactions of school discipline, especially manual work, and the inspiration of the chief essential—the living teacher. As Carlyle says, "Soul is kindled only by soul."

What is the goal for the pupil in education for occupation, citizenship, and character? Is it not also a threefold ideal: creation, service, and harmony? The worker must be neither slave nor automaton, but creator. The fatal American trick of imitation must be supplanted by the spirit of workmanship, induced by the reward of work as well as rewards for work. The citizen must be not merely a perfunctory voter, but a public servant. He is not citizen but parasite if he make no return to the state for its beneficence. Character is expressed ultimately in the development of a harmonious nature—in harmony with the great economic processes which make life possible, in harmony with one's fellow-men, and in harmony with oneself, with nature, with the great Life-Force.

What constitutes the life of the teacher who can realize these ample ideals? She also has her trinity of possibilities: individuality, independence, inspiration. No life worth living is all leisure, but there need

not be exhausting, ill-rewarded labor, and inadequate, empty leisure. One must have satisfaction in his profession or he cannot find it in his pay. Work and life may be a unit, if the teacher have individuality, independence, inspiration. "Art is the expression of surplus energy." If the teacher is to have individuality, to make her work an art, she must have thoro preparation, involving years of labor and much expense. She must have few pupils at a time; she must have good living, both physically and spiritually. Energy must not be consumed in undertaking the impossible because of insufficient preparation, overwork, or a low standard of living. She may not be able to ape the extravagance of the overpaid rich, but she must live, at least spiritually, as well as her patrons. She must, therefore, have both time and means for self-development.

Independence demands adequate economic support to suppress care or want. Good housing, food, clothes, books, and recreation involve doubling the average teacher's salary. Equal wages for men and women are ultimately desirable, but immediately a minimum wage is more important. Every teacher must have a living wage, and then we can afford live teachers. The effort to give women men's wages must not result in giving men women's wages. Salaries which invite men would soon solve the question of the needed number of men. We must have more rather than fewer men in the schools that we may have men not merely in authority but as colleagues and comrades. The able men are attracted to the executive positions (except for a few missionaries), and other men of ability are shortly drafted off to other callings; thus the women are generally economic subordinates. The masculine and feminine mind and character do not have free play.

The teacher must have self-government by equal suffrage in the state and by constituting a "faculty" for the conduct of educational affairs. How can children be taught citizenship by economic, political, and professional dependents? The contempt of man for petticoat government is the product of chivalry, that semi-barbaric device for keeping women dependent by flattery. Olive Schreiner says that men have never objected to the historic labors of women interfering with maternity, but they revolt at the rewards which make women genuine economic competitors. Even the masculine educator innocently protests against the unfeminine tactics of women politicians because he intuitively sees the fading of his prestige, which was built on her supposed infirmities. It is obviously weakness rather than strength which causes a man to depreciate the service of a woman president. A virile mind is strong enough to recognize excellence and demand it; only cowards, parasites, and weaklings attempt to disguise it.

Self-government in the National Education Association is prophetic of self-government at home. The newly enfranchised often make mistakes, but they are the mistakes of enthusiams, not of spoils or chieanc.

The methods of electioneering may be faulty, but they are the blunders of the untrained, not the stupidity of the privileged. In any case, citizenship can be learned only by being a citizen. The self-governing school, where the teachers have authority over the curriculum and the pupils over the classroom, is indispensable to the success of democracy. Principals and superintendents are expert civil servants; school boards are the representatives of the people, instructed by their constituents, and successful as they have given freedom to their superiors (in teaching), whom they employ for the people. The self-governing school and the self-governing workshop are the corner-stones of democracy. Without these we have benevolent feudalism with its contented or intimidated masses, luxurious masters, and their decadent offspring. With self-government we have emancipation and mastery by service. The teacher will be independent in her work and in her leisure.

The teacher must have and be an inspiration. She has the inspiration of contact with youth, minds immature but unspoiled, unfolding according to the law of the cosmos. The teacher must also enjoy the inspiration of nature in flower and sky, by excursion and reading. The teacher must have communion with fellow-men; both sexes are needed for morality and harmony. The teacher must have the inspiration of the infinite. Then, indeed, will soul kindle soul, and industrial organization, the democratic spirit, and the cosmic sense be incarnated in our children in creative work, public service, and harmony of soul.

CAN WE SHORTEN THE TERM OF YEARS WITHOUT DECREASING EFFICIENCY OF EDUCATION IN AMERICAN SCHOOLS?

SAMUEL AVERY, CHANCELLOR OF THE UNIVERSITY OF NEBRASKA, LINCOLN, NEBR.

During the last few years there has been a tendency to give less consideration than formerly to the problem of shortening the length of the courses in American schools. The lack of results following President Eliot's plan for a three years' course leading to the baccalaureate degree, and the efforts of the Carnegie Foundation to hold the institutions participating in its retiring allowance to their nominal standards for admission and graduation, have been two influential factors in lessening interest in the problem. Then, too, the awakening of the country to the fact that some agricultural colleges and some independent normal schools were giving degrees based on very inadequate courses of study, and the general feeling that our professional men should be as well trained as those of Europe, has led to complacency in regard to the lengthening of the period required from the entrance of our public schools to the time of granting the professional degree. It has seemed to me, therefore, not inappropriate to review the situation, and to recall

to your attention suggestions that have been made from time to time by our most eminent educators in regard to conservation of time and promotion of efficiency.

If an American boy enters a public school at six, spends eight years in the grades, four years in the high school, four years in a general literary college, and then four years in a medical, law, or graduate college, he will be twenty-six years old before his education in the schools is completed. If his college and his university work are combined in a six-year course he will be twenty-four years old.

I think that no educator in America would make a serious claim that such a young man is better educated, either culturally or professionally, than the German who has taken a course consisting of the gymnasium and the university, losing a year in the army, and graduating at the age of twenty-two. As a matter of fact, I think I am safe in saying that the American at twenty-four is about as well educated as the German at twenty-two, except that the latter has a far better command of his native tongue and of foreign languages.

It would appear that even a superficial comparison of results obtained here and in Europe should act as a challenge to us to do better work and in less time, for I cannot believe that the average American youth is not as bright as his European cousin. In fact, it is a very common observation that American children in German and French schools make remarkable progress; that American children generally are more precocious than European; that American students at maturity excel in their work in foreign universities. The only exception would seem to be in the case of the Rhodes scholars, but the fact that the Rhodes scholarships are awarded to a very considerable extent on account of proficiency in Greek and in athletics easily accounts for lack of brilliancy in scholarship on the part of the holders. One could hardly expect that young men selected largely on the basis of a vanishing, and a distracting subject, would be brilliant scholars. Granted, then, that there is no inherent reason why we should not produce the results obtained in Europe, we as educators should study our system until we discover just where the waste is to be found.

Of course, you are all familiar with the proposed remedy of better teachers, and there is no need for me to recall the oft-repeated statement that in Europe teaching is an honored profession and represents a life career, while here it is in many cases only a temporary expediency. I grant that this statement has in it some elements of truth, but I am inclined to believe that this phase of the matter has been overstated. Let any American city superintendent be given the support that the corresponding German official has in building up his corps of teachers, and he can produce an almost equally efficient corps. The vital trouble is the lack of support given to the authorities, the uncertainty of their tenure of office, the necessity of their catering to local influences, and the difficulty in resisting local

pressure where pressure is exerted in opposition to the interests of the schools. I believe, therefore, that the first thing to do with our American system is to strengthen the central authority. The state superintendent, or corresponding official, should be appointed for an indefinite period. He should be selected from the educators of the nation at large, not necessarily from the ranks of the teachers of the state which he is to serve. His position should be as permanent and as dignified as that of the minister of education in a well-ordered European state.

City superintendents should be regarded as permanent officials, and should be subject to some authority removed from the immediate influence of the community. City superintendents should be entirely relieved from the necessity of playing politics to hold their positions. Strengthening the hands of the school authorities will in a very large measure solve the problem of inefficient teaching.

In the internal working of the school I believe that certain things can be changed without detriment. The special supervisor is at times a special nuisance. I recall my own experience with a supervisor of music. Having no ear for music, I was exposed to the dilemma of refusing to try to do my part, or submitting to the ridicule of my classmates for seldom being able to get within several notes of the right one. As most of the work was class, and not individual, however, I hit upon the expedient of watching my music teacher and trying to make similar muscular movements with my lips, jaws, and larynx. This soundless music served the purpose, but I recall with regret the wasted time, and my early lesson in deception. I would not belittle the efficient work of these special supervisors in the schools, but I would limit their activities to those pupils who show some aptitude for, and whose parents wish them to pursue, such extra studies.

One source of waste both in the high school and in the college is excessive and absurd "laboratoryism." Now, I am the firmest sort of a believer in laboratory work—definite, exact, carefully planned, and carefully supervised—but I believe that for the bright student there is an enormous loss of time in excessive laboratory "puttering" and in writing descriptions of the work performed. Let us never for a moment forget that in education the mind, and not the notebook, is to receive the impression, and that carefully prepared experiments become so much laboratory junk unless the performing of them makes on the mind an impression of the scientific principles which they are supposed to reveal. In high-school chemistry, for instance, there is little to be gained thru the elaborate setting up of apparatus. A graduate recently said to me, "We put in a week making hydrogen. The instructor left us in the laboratory and told us to follow the inductive method. After a number of dangerous explosions we finally succeeded." With proper apparatus any intelligent pupil ought to do the mechanical part of making hydrogen in fifteen minutes. An explosion is a disgrace to the laboratory. All laboratory work should be under constant supervision, and in charge of experts.

In this connection I cannot resist registering a protest against the excessive amount of mechanical teaching in other than laboratory subjects. A notebook in history or in English may be valuable as evidence of study, but if it is valuable for this only, it should be discarded. A teacher should not require the pupil to spend much of his time in producing evidence that the subject has been thoroly considered. He should find some way less wasteful of the student's time for determining the student's intellectual attainment. Too many of our teachers find that the easiest way to occupy time in the schoolroom is to set the pupils at some more or less mechanical exercise which is to be turned in at the end of the period. It is the business of the teacher to teach, and any teacher who, without a careful consideration of whether or not it will be for the benefit of the pupil, introduces any mechanism to lighten his own work and keep the pupil occupied, is not doing his work fairly and honestly.

A tremendous amount of time has been lost for the average student in physics by the mathematical character that has been given to the work during the last twenty-five years. In some of our high schools and universities the course in physics has been so planned that it would be admirable for the production of a Kelvin, but would exclude a Faraday who had no taste for the mathematical phases of the subject. Physics ought to be the most popular study in the high-school and college curriculum; it is in the truest sense a fundamental science. I venture the opinion that not one-half of the students in the average American college gain much of value from the greater part of the course in this science. The high schools make a better showing. The mathematical part of physics should be largely eliminated, and physics made a study of intense human interest. This statement, of course, applies to the many, not to the few who are to become specialists.

In the best European schools below the university it is strictly understood that the young people are not in society—they are boys and girls. They have no social life other than that which they get incidentally with their parents. There are no interschool affairs, no contests, nothing to disturb their studies. They go to school forty weeks in the year, as against thirty-six in America, and they have a half-holiday instead of a whole holiday on Saturdays. Americans are more nervous than Europeans and their program would perhaps be too strenuous for us, but I believe that social distractions, more often than study, cause the student in the high school and in the college to break down. The extent to which some American mothers encourage their daughters to be "society girls" is grotesque. It has perhaps no equal anywhere else on the globe, except in parts of the Philippine Islands, where the natives who have a little money send their daughters to school in dresses with trains, with maids to assist them. The high-school boys also are accompanied by their valets. The insular bureau of education is doing much to eliminate these foolish customs. In

so far as we encourage the society notions of our young people, we are putting ourselves in a class with the natives of the Philippine Islands rather than with the enlightened people of France, Germany, and England.

Before the English-speaking people come to the full realization of their destiny, two reforms must take place. I grant that it would not be possible for the teachers to bring them about at an early date. They can, however, constantly be educating the public to a realization of the need of these reforms. I allude to the adoption of reformed spelling and of the metric system. Probably the continued use of our accidental system of spelling costs at least two years of a child's study, and handicaps all of us more or less during our entire lives. Here, again, we lag behind France and Germany. To be sure, they have their spelling troubles, but they are meeting them in a more vigorous way than we have met ours. For a nation that believes in progress in all things, with exceptional knack at invention, to "stand pat" on a system of spelling irrational and of exceedingly questionable origin, represents a most astonishing phenomenon. I have heard appeals from educated men urging us not to desecrate the English of Shakespeare in the interests of a modern fad. Alas, the Shakespeare that we read now is printed with much of the spelling of the continental typesetters who came to England in the seventeenth century and brought their notions of how to express English sounds along with them. If Shakespeare were to appear now he could read Hamlet just as well in simplified spelling as in the copies on our library shelves. When will the race be wise enough to learn that language is a living, progressive thing, and that resistance to changes can only impede, not prevent, its progressive development? We ought, therefore, to move just as rapidly along the line of simplified spelling as we can without creating too great confusion.

When I was a student in the German empire in the '90's, I found the memory of the war of '70 fresh in the minds of the people. All the older people recalled its memorable scenes; the marching of the troops to the front, the victories, the proclaiming of the King of Prussia Emperor of United Germany; and yet one of the incidents of the time—the introduction of the French system of weights and measures into the new empire—was forgotten. The oldest inhabitants sometimes alluded to a pfund in the sense of a half-kilo, but aside from this there was hardly an expression, even among the peasantry, to show that the older system of weights and measures was even a memory. The German pupil does not have to contend with an irrational system of weights and measures. Then, too, he has a language to learn in which, if he knows the sound of a word, he practically knows the spelling of the same. These two conditions would, to a very appreciable extent, explain the reasons why an equally complete education in America requires two or three years longer time than in Germany.

In our college and university courses in America, we are confronted with two problems which require our most careful consideration. If the student is obliged to pursue a rigid, inflexible course, he must often waste his time on subjects against which his mind revolts. No course of study could be more wasteful than one filled with subjects in which the student has, or can acquire, no interest. On the other hand, the free elective system is peculiarly wasteful in permitting a student to trifle away his time on subjects which can afford him no real help in his later work. A college diploma based on subjects without sequence, elected without deliberation, sometimes made "snaps" thru the desire of professors to increase the size of their classes, is an absurdity. Let the student be free to elect the group of studies which is congenial and which forms a part of his training for his prospective life-work, but let his electives within that group be of a very narrow range. The character of the greater part of his work should be determined by the experience of people older and wiser than himself.

Aside from the saving in the cost of education, the question naturally arises, What is to be gained by producing well-trained men at an early period of life? Why should we insist that our doctors of medicine or doctors of philosophy should be as competent and efficient at twenty-two as they are now at twenty-five? Some of the reasons are so obvious that they hardly require consideration or discussion. There is one point, however, worthy of special emphasis. We are woefully behind Europe in productive scholarship. That our five hundred colleges and universities produce only about one-tenth as much in volume (I dare not make a comparison of value) of research work as the twenty-one universities of Germany, is not creditable to us as a people. Research is to Germany a great national asset. I need only allude to the discovery of chloroform in Leibig's laboratory, the discovery of the principles of incandescent gas mantles in Bunsen's laboratory, the researches on glass at the University of Jena, to confirm my statements. Wonderful advances in medicine have also been greatly stimulated because the leaders of medical thought have had the constant assistance of young doctors, highly trained and desirous of working under master minds for a year or two before going into the active practice of their profession.

While I would emphasize the need of an early selection of the pupil's probable career, I would not advocate separate secondary schools for agriculture, domestic science, and the trades. We find that the best work in law, in engineering, in medicine, in agriculture, is done in universities and not in disconnected colleges. So the high schools should have different sections. No attempt should be made to convert the high school into a fitting school for the college. It is equally undesirable that high schools should pay no attention to the colleges but train exclusively for the active duties of life. The high school can and must perform both of these functions. Let the high school be a true people's university, completing the

education of those pupils whose period of study will not be more than ten or twelve years, and fitting for further study those pupils whose work in life requires a longer period of instruction.

It seems to me that we should now admit to college picked students who have successfully pursued certain studies for three years in our best high schools. The high school might give extra credit for unusually good work and thus permit the student to acquire the number of points necessary for graduation in a minimum of three years instead of four. Such extra credit should be given for proficiency in such studies as foreign language, mathematics, science, and the English tongue, not for subjects like manual training, domestic science, and other things which, no matter how useful, can be mastered with less academic attainment. These selected pupils should complete the work in law, in medicine, or in the graduate college in six years. A year should be saved below the high school, thus making units of seven, three, and six years, or sixteen in all, instead of twenty, as at present, in accordance with the longest program. I would not advocate curtailing the activities of the high school or the colleges and universities, but merely the blazing of a path from the first grade to the Doctor's degree, which can be traversed in sixteen years.

I realize that some of the changes suggested can be accomplished only after a long period of constructive work and public enlightenment, yet I believe they can in the end be brought about. We must learn to look at the problem of education more and more as a problem of efficiency, in the engineer's use of the term. The factors of time and expense, as well as the character of the finished product, demand our attention. Our school system is now able to turn out men comparable in educational attainments with the products of the European schools, but at the expense of time. Even this state of progress had hardly been reached twenty years ago. It is now part of our duty to overhaul our system and institute changes that will result in the saving of several years' time. The American people have succeeded in every problem they have undertaken seriously and unitedly to solve. I cannot believe that they will fail in one of the most vital of national problems, the problem of an educational efficiency equal to that found anywhere in the world.

PRESENT PROBLEMS IN ENGLISH EDUCATION

KATE STEVENS, PRINCIPAL OF THE NORTH ISLINGTON CENTRAL SCHOOLS FOR GIRLS, LONDON, ENGLAND

In England, of late years, educational change and progress have been so rapid that it has been difficult even for those most concerned to follow the various movements; while to those who have neither the time nor the opportunity for such a study, it cannot fail to present much that is difficult, if not bewildering, owing to the great variety of conditions and different

types of schools. It may somewhat clear the ground if we recall the chief landmarks in English education since the Act of 1870 which made it compulsory for all children to receive an elementary education. In order to carry out this act, school boards were created. The existing provision of school places had been provided by religious denominations (Church of England, Roman Catholics, and Wesleyans chiefly) and the British and Foreign School Society, where religious instruction on undenominational lines was given.

Up to 1870 religious instruction had been looked upon as one of the regular school subjects. In 1870 this was changed. Scripture was now placed outside the legal, secular school hours. It was to be given at a certain definite, fixed time each day, and a "Conscience Clause" was obliged to be placed in every school, stating that, should any parent object to his child receiving the religious teaching of the school, he was to be withdrawn from such teaching, and suitable provision was to be made for his secular instruction during this period. The schools already in existence, and mainly of a religious foundation, were now officially known as "Non-Provided" Schools, while the new schools built by the school boards out of the local rates, in order to meet the great and new demand for school places consequent upon Mr. Foster's Act of 1870, were termed "Provided" Schools. Religious teaching was now no longer either required or forbidden. No child was now allowed to be excluded from any school for not receiving the religious teaching, or attending the Sunday school, or church services favored by the managers of the school. As a further safeguard the "Cowper Temple Clause" enacted that in a school provided by a public authority or school board, the religious lessons, if any, should not be used to attach the children to any particular denomination.

Neither the "Conscience Clause" nor the "Cowper Temple Clause" requires religious teaching to be given. They emphasize the principle that public institutions must be freely open and suitable for all denominations. "The difficulty," says a paper published by the National Education Association of England, "is not whether there shall, or shall not, be any recognition of religious thought and feeling in the schools (for the parents as a whole have expressed themselves as being most emphatically in favor of Bible-teaching in the schools), but whether schools, provided and maintained at the public expense, shall, or shall not, be used to further the interest of a particular denomination or church."

Formerly the Non-Provided Schools were supported partly by the state grants and partly by voluntary subscriptions and scholars' fees, while the Provided Schools were partly supported by the state grants and school fees, supplemented by local taxation. School fees were abolished in the Provided Schools in 1892 and in most of the Non-Provided Schools by 1895. The voluntary subscriptions fell off so greatly that the strain and burden on the churches became "intolerable." In 1902 an act was passed

which abolished the school boards and placed the education of the whole country, with the exception of London, under the control of the county councils and made local taxation also available for the support of the Non-Provided Schools, while at the same time they still kept their distinctly denominational teaching. At this there was a popular outcry, and the "religious difficulty," which still remains one of our great problems, arose. "Passive registers" became numerous. These were people who conscientiously objected to provide public money in aid and furtherance of sectarian purposes, unless the management was under public local control.

It is the extremists on both sides who block the way. An "educational settlement committee" has been formed under distinguished leaders "to promote and maintain religious teaching as an integral part of the national system of education." Much is hoped from this committee.

The "Moral Educational League" was formed "to introduce systematic, moral, and civic instruction into the schools of the country," in place of direct religious instruction. There is also a "Secular Education League," which was formed to consider whether, in view of the failure of the Education Bills and compromises, the societies could now join with each other in a united movement toward the secular solution.

Our problems are many and varied. In some, we have gone far toward what seems to present a satisfactory solution under the circumstances, and under existing conditions. One has always to face the fact that conditions constantly change, and development is often rapid, calling for new solutions. In the solving of many of the more general problems, you, in America, have led the way and we have been able to follow and profit by your experience. It is always inspiring and suggestive to us to visit your country, talk with your school people, or to read your best educational literature.

Turning now to other special English problems, the one most generally occupying the foreground, as of vital importance to our national welfare, is that of dealing with our adolescents at and after the school-leaving age of fourteen. The fact of the grave waste of time and opportunity that has been going on during the most impressible years of the life of our young people has been effectively brought home to us in the realization that over 80 per cent of our prison population began to go there between the ages of sixteen and twenty-one.

Mr. C. P. Trevelyan, parliamentary secretary to the Board of Education, says:

> One of the most pressing problems of the present time, one of the directions in which English education is most inadequate, is in connection with children whose education entirely ceases at, or below, the age of fourteen, who do not go on to secondary schools and who either cannot go to continuation schools, because the nature of the industries in which they are engaged does not permit them, or who will not go to any further education, because there is no influence, private or public, to induce them to continue their education. I do not wish to belittle the work which our continuation schools and our

technical schools, all over the country, are doing. They are doing far more effective and systematic work than they used to do, but there is this remarkable fact about the increase of the numbers attending our continuation schools in the last few years, that it has been almost entirely in the number of adults. It is not the children of thirteen to fifteen who have been going more readily to these classes, but adults over the age of twenty-one. This shows that large numbers of the more intelligent part of our industrial population, as soon as they leave school, drop out of school life and very likely lose a great deal of the advantages of the education they received there. They go out into the world, and then five or six years afterwards, having had perhaps some ugly experience in life, they realize the inefficiency of their education and return to the continuation schools to learn. These people who come back are the men and women in our industrial life who have got the most grit, and who understand that they must get more education, after these years of experience. But these people suggest to us an army of others, less enterprising, and more helpless, than themselves, who do not come back after the age of twenty, and who are still more unfitted for life. It is the mass of children from fourteen to eighteen years of age, who, I think, are the most neglected part of our population at the present time. After all, fourteen to eighteen is the critical age.

The leisure classes submit their children to the sharpest discipline and the hardest work between these ages; they know that these are the malleable and formative years of a child's life. We, however, are content to allow hundreds of thousands of boys and girls to go out into professions, or no professions, at this age. We allow them to go to street trading, and you hear from chief constables that two-thirds of the street traders are in the police courts every six months. We allow boys to go out as errand boys in thousands, and they come back into the industrial world at sixteen or seventeen without any occupation at all. We allow in fact, during those years, an immense manufacture of loafers and wasters. . . . . If they could compel such children to continue their education they would have grasped the real nettle of the difficulty of the creation of the loafer. I feel sure that you are right in considering that, at this moment, the most serious defect in our whole education system is the lack of sufficient means of continuing the education of boys and girls when they leave the elementary school between twelve and fourteen years of age. The extent to which they forget in many cases all their schooling is most distressing and dispiriting for educationalists. You will see that we have just introduced a bill which will require all children to stay at school until at least fourteen, unless the local authority provides compulsory education classes which will continue up to sixteen. I think that the next great step therefore will be in some way or other providing that the children who leave school for labor shall continue, for some years at any rate, to go to school, if only for a few hours in the evening. If we can accomplish this, and perpetually strengthen and extend our secondary schools, we shall be able to boast that we have a fairly complete system of education and what we ordinarily call an "educational ladder."

The religious difficulty, of course, remains very tiresome and cumbersome to our work; and it is impossible to believe that we shall remain very much longer with a system under which so many of the teachers whose salaries are paid by the state remain servants of a denomination and not of the state that pays them. I do not know that there is any book or pamphlet which I can specially advise you to read as to education policy.

I am very glad that you are going to mention the strong feeling here on the subject of arbitration treaty with America. I remember speaking about it myself twelve years ago or so, when I was over in America, and finding even then a very ready response to such an idea.

Professor Sadler remarks:

Not only have we freed our boys and girls from school discipline and influence at the age of fourteen at the latest, but we have provided no substitute, tho we knew

that in most cases they were quite out of hand as regards parental control. We have shifted the burden and responsibility on to other shoulders, tho we have most of us had an uneasy conscience in so doing, and many in an individual way have tried to stem the overwhelming tide. The children, we find, not only deteriorate on the moral side, and seem to have little, if any, sense of social, civic, or any other responsibility, but they appear to have forgotten most of what they ever learned in school. This has given us as a nation food for serious reflection, and the country is now, I believe, thoroly awakened to the gravity of the situation.

In order to try and remedy this state of affairs, there have been many efforts made which have culminated in:

THE NEW EDUCATIONAL BILL, 1911

Mr. Runciman, as minister of education, on May 27, 1911, issued a bill with the following objects:

a) Abolition of the existing half-time system.

b) To give power to local authorities to compel the attendance of children, who have ceased to attend the elementary school, up to the age of sixteen.

c) Where this compulsion is not applied, fourteen will be the age for leaving school.

Further, the authorities will have the power to compel children to attend school between fourteen and fifteen years of age, but those who are to be employed in agriculture may be exempted from school attendance at thirteen.

This bill is now before Parliament.

There has been a marked development on the social and ameliorative sides of school-life. In rapid succession we have had a series of acts of Parliament dealing with the intellectual side of the education of the schools.

Mr. Runciman says:

> There is no social effort that holds out the same degree of hope as the work of the schools; we must link up the schools to all our social efforts.

For some time past there has been a demand for a more practical school education, for a system which, while giving a good all-round training, will at the same time give a definite bias and have some practical relation to the future career of the pupil. In order to meet this demand the London County Council education authority has lately established what are termed "Central Schools." About forty of these have now been established, containing about twenty thousand pupils. Schools on somewhat similar lines have been established in Manchester for some time. These schools take both boys and girls between the ages of eleven and twelve, for a four years' course. The curriculum, which can be varied to suit local requirements of a district, must provide manual and practical work for all, and instruction in domestic subjects for the girls. No class may contain more than forty pupils. These schools are not elementary, nor are they secondary, in the ordinary sense of the term; they come nearer the technical, but with the definite aim of fitting the pupils for the work they will have to do in later life. They correspond, tho with some dif-

ferences, to the *Gewerbeschule* in Germany. There are also day technical and trade schools for boys and girls.

The English press has lately been giving much attention to the question of the dangers of a more or less irresponsible bureaucratic government of the schools by permanent officials, whether central or local. The subdivision into so many departments tends to the multiplication of the office and clerical work required from the teachers. The board of education, in fairness it must be said, have of late years done much to lessen that burden. The local authorities, on the other hand, are continually increasing the amount. Again there has been a demand on the part of the public elementary school teachers of England that the highest educational posts should be thrown open to the most suitable and competent persons, including the teachers themselves. This involves the question of class prejudice, which dies so hard in England. In spite of repeated galvanic efforts to keep it alive from above, it is slowly but surely being undermined by the ever-advancing democratic spirit which marks the present day. The system of open scholarships in the schools by which a promising pupil may pass on, by stages, from the primary to a higher school and then on to the university, has done much toward this end. There is now an educational ladder, tho with still some missing steps, it is true.

Another vital problem, following upon the introduction into the schools of the school nurse and medical inspection of the scholars, is the great need of the establishment of school clinics in order that the treatment of minor ailments may be efficiently carried out. The indifference of some parents, the loss of time involved in taking the children to the hospitals, and the great distance of these from the homes of many of the children, all prevent the greatest good from following the visits of the doctor to the schools. In the few instances, mostly on private initiative, when school clinics have been formed, great good has resulted in the physical and mental improvement of the children concerned, and the questions of too much homework, of unhealthful excitement, and of insufficient or non-restful sleep, now receive attention.

The grant-aided secondary schools are now obliged to reserve 25 per cent of free-school places for the most gifted and promising pupils from the primary schools.

The professional status of the primary teacher has been raised of late years:

a) By the higher standard of attainments required and the greater facilities afforded for a higher or university education. No one is now allowed to enter the profession without having been a pupil in a secondary school.

b) By increased salaries and better pensions (already granted or prospective).

c) By a growing feeling in the public mind of the immense value and importance of an efficient education, and of how much the people owe to their schools. At every important trades union gathering, educational questions now play a large part. This indicates a growing interest on the part of the parents and citizens.

Time will allow only the briefest mention of other problems:

1. *Balance of studies.*—We are coming to see more and more the importance and necessity of correlating the motor and creative side of education with the intellectual, and departing from our former ideal of a merely bookish education. We have, within certain limits, great freedom in the framing of the curriculum for each school in accordance with the special circumstances and environment of the same.

2. *Age at which specialization should begin.*—There is some danger of beginning too soon before a good solid foundation of general education has been laid. Some advocate between the ages of eleven and twelve, but I greatly doubt whether it is wise to begin vocational specialization before the age of thirteen to fourteen. Does not the pupil with the wider foundation, more fixed and better habits of application and study, really progress the more rapidly in the end? There is a divided opinion on the subject.

3. *In the question of special departments vs. schools,* the trend of opinion is decidedly in favor of the former as against the latter. It is bad for both children and teachers to be shut off in separate isolated departments—it tends to narrowness and clique formations.

4. *Language teaching.*—The teaching of phonetics to beginners with much use of the direct method, gradually becoming less interesting (objectively), and more strenuous, seems to commend itself as the best solution.

The classics still retain a foremost place in our great public schools and older universities, as being of the highest literary and disciplinary value, tho recently at Oxford, for the first time, it has been made possible for a man to obtain an honor degree in mathematics or science without compulsory Greek. In the newer universities and secondary schools with modern sides, more stress is now laid on modern languages than on the classics as being a better preparation for a livelihood.

5. *Private schools* are both numerous and influential. The best ones are most helpful in being able to initiate, and often scientifically carry out, educational reforms and experiments, owing to their comparative freedom from official control, and to the smaller classes. These plans, when matured and successful, are then frequently adopted by the educational authorities.

6. *Physical education, athletics, and school games* are all of importance. In all the primary schools one hour a week in physical exercise is compulsory, as are also organized school games in infant and primary schools. In the secondary schools, games and athletics play a large part, and in some cases there is the danger of their being considered of greater value and importance than the intellectual side of the school work.

7. *The organization, reorganization, and in some cases the reform of the secondary schools* of England has made great strides since 1902, when they were for the most part placed under the control of the local education authorities. One of the problems connected with all secondary schools of whatever type is: By what main aim are they to be dominated? Are they to work upward with an eye to the more brilliant pupils who will proceed to the universities, or for the general good of the majority of their pupils who will, at the age of sixteen to eighteen, go direct from them into some business or profession?

8. *The use and place of examinations* is another of our problems. We have been too much dominated by them in the past; they still influence the curriculum and are too often the means by which the success of the work of a school or college is tested. They are useful as a test of progress, and grasp, and ability to reproduce a subject, but they must be taken, in their final issue, in conjunction with the regular, steady work and application, and especially in the sustained effort put forth by the student.

The University of London, originally an examining body, was reconstituted by statute in 1900 as a teaching university. It has become a great federation, including twenty-six colleges and schools giving instruc-

tion in eight faculties (arts, law, medicine, theology, science, engineering, economics, and music). The municipal universities of Manchester, Sheffield, Birmingham, Leeds, and Bristol have all been organized since 1900. These modern universities have been marked by their equipment in science (pure and applied) and by their able departments of pedagogy. Manchester and Birmingham have given prominence also to problems in sociology and economics.

9. *The relation of the old and new universities.*—Oxford and Cambridge were originally established for the study of the classics. Now Cambridge has a fine Science Department, with splendid opportunities for research work. But the newer universities supply a need, in that here we have applied science. King's College, London, has a fine engineering side. It also, on the women's side, is making domestic economy a university subject. Yet in classics, Oxford and Cambridge still lead and an ambitious man who cannot begin by going to Oxford or Cambridge direct, will try to go there after taking a degree at one of the newer universities. London University is also now granting a degree which practically is a commercial one. The older universities have modified their methods to some extent in scientific matters; e.g., Cambridge does research work in agriculture.

Perhaps I may be allowed to quote the following as an example of the development of the work of our newer universities:

The committee appointed by the Council of Liverpool University to consider the course of study and the regulations for the degrees in commercial sciences has now delivered its report. The Committee has the assistance of leading business men of Liverpool in the work of devising a course of study which will be practical, and at the same time of a true university type. A day and an evening course for the commercial degree will be inaugurated within the next few months. Commercial-degree courses have proved very successful in Manchester and other places, and there is every probability that the experiment will succeed in Liverpool. Graduates in commerce will, it is anticipated, be offered substantial advantages on entering employment, either in the form of a shorter term of apprenticeship or increased chance of promotion. In order to keep the commercial community of Liverpool interested in this form of university activity it is proposed that the merchants should be appointed to an Advisory Board, so that the educational courses may be prevented from becoming unpractical or useless for commercial purposes. It is believed that the new class of students to be attracted by the scheme will prove a source of real strength to the University.

10. *We have a great need for a central bureau of education* similar to that at Washington in this country. We have much good work and many valuable educational experiments going on thruout the country, but the information regarding the same is not generally and universally available. In fact, one of the best places to learn of what is going on systematically in our own country, from a wide and comprehensive outlook, is often in the Annual Report and Survey issued by the Bureau of Education of the United States.

11. *The question of pensions for all grades of teachers*, especially with regard to those engaged in secondary schools, is occupying a great deal of attention at the present time in England.

I will close my paper with the following extract from a letter recently received from Professor M. E. Sadler of the University of Manchester, England:

I am glad you are taking as the subject of your chief address "Present Problems in English Education." It is almost impossible for anyone at a distance to get a mere reading idea of the strength and range of the educational movement in Great Britain at

the present time. They will get from hearing you a true impression of the complexity of the forces which are at work, of the magnitude of the administrative problem, and of the hopefulness of the opportunity which lies before us.

Every grade in English education and all the different types of school in each grade are coming under the influence of a changed point of view—a stronger sense of the unity of national education and of its intimate connection with home-life, with industrial conditions and with social ideals. This seems to be the fundamental fact in the situation —an awakening—a new sense of the interdependence of the different parts of national life, a broadening of the outlook, a deeper feeling of the responsibility and for the need of co-operation between agencies hitherto separate, and with this there has come a desire for study and a greater readiness for united action for the common good. There has never been anything like it in the history of English education. It is impossible to predict, I think, what will be the first administrative result of this new movement of thought. I doubt whether in legislation or administration it will be found possible to give adequate expression to the thoughts and hopes which are rising among those who know the schools and who realize the needs of the city and village life. We must not feel discouraged because we cannot see far into the future effect of it.

M. E. SADLER

EASTWOOD, WEYBRIDGE

I agree with you in thinking that, in its broader sense, the religious aspect of education affects all our problems and cannot be ignored without injury to the character and outlook both of the pupil and teacher.

PEACE IN THE SCHOOLS

KATHERINE D. BLAKE, PRINCIPAL OF PUBLIC SCHOOL NO. 6, NEW YORK, N.Y.

Twenty three years ago I came to my first National Education Association meeting in San Francisco. San Francisco was so kind to me then that I can begin no speech in San Francisco without a word of appreciation for your kindness to me in the past, in the days when your city was a dream of the early gold-seekers, days when every street was full of memories of the past and the romance of the past. For your kindness to me then I thank you, and for your kindness to me now, today, when that city of the old days is gone, and the new city, the wonderful city of courage, of splendid, invincible courage, has come into being since the fire. I cannot begin without thanking you again from the bottom of my heart for all your kindness to me, and without again saying how wonderful I think you San Francisco people are.

I chose the title of my speech a long time ago. I say this because some of you may think it strange for such an insurgent to be talking of peace. But I believe that the insurgency that had its first triumph in Boston when we elected this noble woman president and the insurgency which won a triumph yesterday is the beginning of a real peace and harmony in this great organization. I believe that insurgents and "old guard" from today on are going to work together in a regenerated organization that will push forward not merely the organization itselt, but the work of education all

over this great country of ours. It is because I believe this that I am glad I chose the title "Peace in the Schools." When I chose that title, Mrs. Young told me that already the subject had been discussed at the meeting of superintendents by that woman who has done so much for the cause of peace in the past few years, Mrs. Fannie Fern Andrews. I replied: "I do not think we can talk too much about peace." So if you are willing, I am going to stick to my text no matter who has talked about it, because I think we want to continue talking just as much as we can about peace.

I have been told that my title is ambiguous, and have been asked whether I am going to talk about the value and the importance of having peace between pupils and teachers, or between superintendents and teachers. But how should I presume to tell you about peace in a school—in my own small school—when we have as our presiding officer tonight the greatest peacemaker in America, the woman who took the Chicago schools when they were in a state of rebellion bordering on anarchy, and in the short space of less than a year changed chaos into order, dispensed even-handed justice instead of favoritism, and welded her corps of principals and teachers into a solid body, all working for the good of the schools, a body that loves Mrs. Young as few leaders are loved, with a deep and loyal affection? I shall leave it to her to tell you the secret of peace between the superintendents and the teachers. I have not come to discuss that question. I have come to plead for peace in its broadest sense, for peace as wide as the world, peace that shall endure while men have breath; to ask you as educators to take the message home to your townspeople, to your children, to band yourselves together to plan for peace against the army that is banded together for war.

The important thing in this country, the thing that I have found to be the cure for all the bad things, is publicity. Let the sunshine of publicity touch an evil spot and that evil spot is cured. The people of the United States do not know what is going on in our government, and we teachers must publish these facts, so that children and parents shall both know; so that our government may not slip so fast toward military dominance as it has of late. How many people in this United States know that the military expenditures have increased 360 per cent in the past ten years? That for every dollar we spent ten years ago we are spending today three dollars and sixty cents? And we are not in any more danger of war now than we were then. We must publish these facts. I saw it stated the other day that if you added up all the expenditures of the national government since this country became a nation, eleven-twelfths of the money has gone for war, past, present, or to come.

I think some of you may remember quite a little flurry that there was in our newspapers last winter over an effort to raise our standing army to an army of a million men! The attempt was caught before it was in a position to succeed, but we must watch things. We must tell our children

what we know. We must tell them that 70 per cent of the money that is spent by this government each year goes for war—70 per cent of it, with only 30 per cent for all the other expenditures of this government. Is it any wonder that some of you teachers have not got exactly what one would call adequate salaries? We must tell our people that Congress can cheerfully vote for two ten-million-dollar battleships a year, and can with equal cheerfulness and scorn reject the request of the Commissioner of Education for seventy thousand dollars for the research work that we all know is vitally needed. Compare those two ten-million-dollar battleships—ten million each—and seventy thousand dollars to look after the children of this country, to solve some of the problems that you and I are struggling with.

Do you know how much it costs to fire a gun—one of those great big guns—on a battleship? In response to a request from me to the Secretary of the Peace Society of New York, the Secretary, Mr. Short, wrote to a congressman, asking him that question, and he wrote back: "Seventeen hundred dollars for one shot." The price of three good teachers for a whole year! What does it cost when they go to target practice? The congressman wrote: "You know we must have target practice. As long as we have battleships, we have to send the men somewhere to do something." Yet this country, which stands almost the first as a world power, stands—friends, let us blush—seventh in illiteracy. America seventh in illiteracy! We who have been so proud of our little red schoolhouse, we who have talked as tho everybody here knew how to read and write and were a thinking, inspired being! I know what you are thinking: "It is our ignorant foreigners." But it is not. It is native-born Americans. We can spend thousands on a sham battle at Newport, but we cannot educate the children in our mountain districts. Now, friends, I dare say all these statistics are very old to you. You have heard them before, but I want you to give them life. I want you to take them home with you. I want you to repeat them to your children. Why is it this way? The military organization of this country is the most complete organization there is. You think your labor organizations are strong, but your military organization is far stronger. If it were not, it could not get 70 per cent of the national income. And that military organization! Think how it is supported. Every city in this country has an armory, and every armory is a clubhouse—a center for military activity, a center for military legislation. Washington is a military capital. In 1909—I don't know how many there are now—but in 1909 there were 727 army officers, either on the active roll or on the retired list, living in Washington with their families, watching legislation, pushing ahead anything for the army, helping that along.

We have here a great organization. If we stand shoulder to shoulder as the sons of Mars do the schoolhouse can conquer the armory. That

is the task we have before us. I have been thinking very hard over the subject. When you have to combat something that should be combated, you must watch the enemy and see what they are doing, and you must play the same sort of a game, as far as you can. They are organized for war. We must be organized for peace. They have their organization not merely in the army, not merely in the family, but they have been cleverer than we are—they have it in the schoolhouse. How many schools have the military drill? Today, all over this country there is a movement—the Boy Scouts. Talk to anyone and he will say that it is peaceful, that it is against war. Is it? On the way out here, in an illustrated magazine I saw a picture of the encampment of the Boy Scouts, and the inscription under it said they had the full military tactics all thru their week of encampment, just the same as the regular army. And they have a khaki uniform. All those Boy Scouts are being trained to revere militarism far more than anything else. It's fun to march behind a band. I never knew it until I marched in a suffrage parade this spring. There isn't anything much more inspiring. I have always wanted to go down Fifth Avenue in a parade, but I never thought I was going to until I did it this spring. And I know now the fascination of these military parades. We must organize peace parades. We must organize a children's association that will offset these Boy Scouts. I have been racking my brain for a month for a name that will be as vital and as crisp and enticing as that name, "Boy Scouts." I don't know whether I have found it or not. But I think we can organize School Boy Friends and School Girl Friends. There's something tremendously attractive about the word "Friend." It is the first word I spoke to you tonight. It is the word that goes to everybody's heart. Perhaps we can make a peace organization just as good as their Boy Scouts if we work for School Boy Friends and School Girl Friends. By the way, I want to tell you something that I think only two or three people know. Mr. Short, the secretary of the New York Peace Society, communicated with the heads of the Boy Scout movement and said: "We want to make a protest against your badge—it's military." And they said: "Oh, no, no! It isn't military. It's just a national emblem!" Then he said: "It shows a war eagle and back of it you have a spearhead." They said: "No, no! That's a *fleur de lis*." "But under it you have, 'Be prepared'." And they said: "Be prepared to lend a helping hand to everybody."

He had an offer from a most distinguished artist to design a badge. Kenyon Cox, whose name you all know as one of the foremost artists of America, designed a badge for the Boy Scouts, a beautiful badge. It has the *fleur de lis* as a background—only it *is* a *fleur de lis;* you won't mistake it for a lance—and it has two clasped hands, beautifully drawn, across the center. Underneath it has the word "Steadfast." It is the same idea, only it is not military. Mr. Cox gave his work to help on this peace cause,

and the leaders of this peaceful (?) Boy Scout movement rejected it. I believe if we can organize our peaceful School Boy Friends and School Girl Friends we can have that badge. I can't make any such promise, but I'm very sure of it, if you will help out. Will you?

Fifty years ago this country was torn in two with civil war. A war may possibly be defensible when you are repelling an invader, protecting your hearthstone; but fighting in a family is a disgrace. I don't know what your papers in the West are doing, but I do know that our papers of the East are digging up that war because it's just fifty years old, and are putting the anniversaries of those awful battles in the papers day by day. I think we teachers ought to stop it if we can. I felt terribly when my superintendent sent a circular to each one of us, asking us to draw lessons of patriotism from this semi-centennial. I could not do it. There's just one reason for us to remember that civil war, and that is so that we shall never have another war of any kind. That war entailed fifty years of poverty, of unhappiness, of misery on our Southern brothers and sisters, and are we going to remember it now? We must forget it. I wish each one of you would be a little center, when you go back, to take the message to the editors of your papers to end this revivification of the Civil War. It's part of the military organization and we must stop it. Twelve years ago a cry swept over this country: "Remember the Maine!" I don't know whether you noticed it, but on the way out here I read General Bixby's report that we have no reason to remember the Maine except in humiliation; that that explosion came from within and was no cause for war. Friends, that "Remember the Maine" was a war-cry. Let us take it for a peace-cry. Let us "Remember the Maine," and when again some war fever sweeps over this country, let us peace-people cry, "Remember the Maine and go slowly!"

This Association has formed a committee and provided a fund to study conditions with regard to teachers' salaries, tenure of office, and pensions. We have been suffering because of present conditions. Our salaries are low because of war. I don't know whether you are familiar with the report of the Massachusetts Commission of Inquiry into the causes of the high cost of living. But that Commission has shown conclusively that each war period is a period of high prices and that in each peace period prices decline and comfort rises. There's a pocketbook reason for you teachers to organize for peace.

I have given you one constructive thing to do in the "School Friends" organization. I want you to take another leaf from the book of the warrior. All over this country there are organizations that you do not think of as military, Sons of the Revolution, Sons of the American Revolution, Daughters of the Revolution, Daughters of the American Revolution, Sons of the Colonial Wars, Colonial Dames, Daughters of 1812. Just think how many people those organizations take in—organizations that are so in love with the warlike character of their ancestors that too often they fight now!

What do those organizations do? They hold meetings and they brag about their General This and General That, and who their ancestors were. And what are we peace people doing? Are we going about, boasting, I am a descendant of Eli Whitney, and I am a descendant of Burr, and I am descended from the founder of this university, from the inventor of that? No. We are letting them take all the fun, and all the pomp, and all the glory. We must take some of it from them. I hope before another year is over to see organized all over this country an association as honorable as that of the Sons or Daughters of any war in the past, the organization of the Sons and Daughters of the Peace Heroes, those who have conquered the forces of nature, who have worked to make life more endurable, who have stood for peace when there was a war spirit abroad; who have helped in the uplift of mankind in any way; a society whose duty it shall be to lift from obscurity the names of those benefactors of mankind; to place, with pomp and ceremony, tablets upon their birthplaces, even as tablets have been scattered over this broad land, holding in the memory of the people the fighters of the past. I hope that this organization will spread from this country all over the world, so that the honor roll of peace may become as long and as glittering as that of war, including all the great leaders of thought, the great educators of the past, discoverers, scientists, or inventors, statesmen who held their country to the side of peace altho it meant the scorn of their contemporaries. The roll of honor in our own land would be bright with the names of Roger Williams, Eliot, the great preacher to the Indians; Johnson of Connecticut, Henry Clay, John Jay, Harvard, Burr, Yale, and the other founders of great universities, Eli Whitney, Elias Howe, Robert Fulton, Benjamin Franklin—the men who have made two grains of wheat grow where one grew before. It is pathetic to see how we have forgotten those to whom we owe so much; the story of the men who have gone hungry and cold and tattered in order to carry out some great scheme for the benefit of the human race, is forgotten. If we honor them, the honor comes too often when they are laid in their graves. Father Mendel, who gave us the law of inheritance which has made possible all the modern scientific experiments in agriculture, died unknown, and with the mortification of knowing that his patient years of toil, ending in a scientific discovery of incalculable value, were unheeded by the people of his day; and the story of Father Mendel is the story of a host of peace heroes. Henceforth this sin of ingratitude, if it continues, will lie at our doors. There is enough work for us to do. If we will do it, we can have just as much fun as those military people; we can have bands, we can put on good clothes, and we can erect tablets, and we can have the fun of collecting money to buy birthplaces and invite the Governor to help dedicate them.

There are some other things that touch us a little more personally. We want to demand the rewriting of our history courses so that they will not

look, as they often do, as tho the history of America were a succession of battles, with nothing of value between. We want to demand that battle dates be forgotten, and that dates of important events be remembered. I do not know how badly you people in front of me sin, but I know that in the last two years in the English course of New York City 33 per cent of the poems that are obligatory are war poems, and yet there are beautiful peace poems, and there are beautiful peace quotations.

If we go back to our children with these war facts, and if we go back to our boards of education with a unified demand for peace work in the schools, we can get what we want, because whatever this National Education Association really wants it can have. There is no question about that. We teachers have the children, so we may say we have the game in our hands, if we will only put our minds to it and stop military drill and substitute peace drill, stop military poems and substitute peace poems, cease to demand the memorizing of "Hohenlinden," the "Battle of Waterloo," "Old Ironsides," and let our little ones instead learn Southey's "Battle of Blenheim," Longfellow's "Arsenal at Springfield," and those beautiful lines from Ruskin's "Dawn of Peace":

> Put off, put off your mail, ye kings, and beat your brands to dust,
> A surer grasp your hands must know, your hearts a better trust,
> Nay, bend aback the lance's point and break the helmet bar,
> A noise is on the morning wind, but not the noise of war.
>
> Among the grassy mountain paths the glittering troops increase.
> They come! they come! how fair their feet, they come that publish peace.
> Behold! the time of wrath is past; and righteousness shall be,
> For the wolf is dead in Arcady, and the dragon on the sea.

PROGRESS IN PUBLIC EDUCATION

FRANCIS G. BLAIR, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, SPRINGFIELD, ILL.

What we are doing in public education today is at least twenty-five years behind what we think we ought to be doing. Recognizing and giving credit for everything that is being done thru the instrument of public instruction to establish and to promote common standards of citizenship, to raise the level of intelligence, and to increase the general efficiency—recognizing and giving credit for all this—the fact still remains that the methods and procedures and the results of public education are at least a quarter of a century behind what our ideals and our best judgments say these methods, procedures, and results should be. A great gulf lies between our theory and our practice. We meet in a great convention like this and felicitate ourselves over the educational outlook. We stand, as it were, like a pedagogical St. John on the Isle of Patmos, look off into the ethereal blue of educational idealism, and imagine that we can see the old order of things passing away and a new educational heaven and a new educational earth

being created. We rejoice with exceeding great joy that the world is to be so quickly transformed thru the instrument of public instruction. But in the gray dawn of the morning after, when we turn our faces to look upon educational things as they really are and see the little circumscribed school grounds, the ill-constructed school buildings, ill-lighted, ill-heated, ill-ventilated, ill-suited to the life and work of the millions of children; when we see the narrow, constricted courses of study, the short terms of school; when we look into the schoolrooms and see the work being done in so many instances by immature, ill-prepared, incompetent teachers—when we see all this a chill of disappointment, amounting almost to discouragement, comes over us and we break forth into the question: Why is it that this great instrument of public education is so unresponsive to the theory and the thought of those who know the most about what it should be? Why is it that this great wagon of the common school is not more closely hitched up to the star of educational progress? Why is it that we can meet here in national convention, adopt resolutions and platforms, which embody the sober and sound judgment of the best thinkers in education, and twenty-five years afterward find that those ideals and judgments have had little influence upon the actual administration of public education?

In no spirit of complaint or quarrelsomeness, I wish to give, this evening, a few of the things which I think explain this obstinate, unresponsive character of public education, for there can never be true educational progress until we have discovered and removed these causes and thereby rendered our practices in the administration of public instruction more sensitive and responsive to the best ideals and the best thought.

The first thing that stands in the way of a quick response, a ready adjustment of the administrative systems to educational progress, is the lack of proper financial support. Look where you will in any of the commonwealths of this great nation, wherever you find the common-school system failing to do the work that it should do, wherever you find it wasteful and disappointing to everybody concerned, the one universal explanation is inadequate revenues. Our child-imagination was stimulated by the assurance that if we ran to the end of the rainbow we should find there a bag of gold. Our mature judgment must understand that if the rainbow of public education which we construct on the Fourth of July and on such occasions as this is ever to become the arch of support for a great efficient public-school system we must find under it not only one bag but many bags of gold. The various commonwealths of the Union entered upon this propaganda of public education with great enthusiasm on the assumption that the safety and welfare of the democratic state depended upon universal and democratic education. This fine sentiment and enthusiasm launched us strongly in that direction, but the difficulty is that, having put our hands to the plow of public education, we have turned back, expecting the plow to cultivate the field and produce the crops without being furnished

the means whereby it could be pulled and whereby the field could be cultivated and the harvest gathered. I believe that the next step in educational progress is a campaign to create sentiment and to direct the attention of the people of the various commonwealths to this need of enlarged revenues if the public school is to be expected to do what it ought to do. We must bring clearly before the people the thought that if this common-school system is to be saved from being a wasteful, disappointing institution, it must be put upon a more solid financial foundation. In conducting this campaign it will be necessary for us to go before the taxpayers in their various organizations—men's clubs, commercial clubs, business men's associations, and before the various legislatures of the commonwealths—and preach this crusade of a more adequate financial support of this great public-school system. And in doing this we will need to discover some arguments in its favor which are not commonly used in educational discussions on such occasions as this, for when we go before these various bodies of taxpayers, and more especially before the various bodies of lawmakers, we shall find that the ordinary eulogy of the public-school system will not count for as much as we thought it would. We shall discover that a new line of talk and of argument is necessary. It will be fortunate under these circumstances if there are those who can present definite arguments to show the relationship which education bears to the institution of property and of wealth.

The common resistance which is offered to every attempt to secure larger appropriations and more generous revenue laws for public education is the protest that such increased revenues mean increased taxes and increased taxes interfere with the value of property, even tending to its confiscation. Every once in a while a man in the legislative hall puts his opposition in this form:

> All of what you say concerning public education is very well, but if we make the appropriation which you suggest, or modify the revenue laws as you suggest, what will the taxpayers say? Will it not tend to discourage the investment of capital? Will it not tend to depreciate the value of property?

When that time arrives it will be fortunate for us if we are able to present arguments which will show that education is a creator rather than a destroyer of values, that education of the right sort—trained minds and trained muscles—tends to increase wealth and to add to the value of taxable property. There are those who must be shown the tangible, quantitative results of education as expressed in dollars and cents. This is not always an easy or a pleasant task to perform, but all over the country men and women are appearing in the forum of discussion who can present this sort of an argument with great skill and with great effect, showing that wherever institutions of learning have increased, wherever boys and girls and young men and young women have been properly trained, there is a corresponding addition to the wealth and prosperity of the commonwealth.

There is another more general relationship, however, which education

bears to property and to property values and it is in this broader view that most of us find ourselves best equipped and most happy in arguing. When we find certain men in lawmaking bodies or among taxpayers who stoutly maintain that value is a thing inherent in matter, that wealth resides in streams, in lands, in the stone in the quarry, in the iron in the earth, we must find a line of argument which will show that value instead of being an inherent thing in matter like cohesion and gravity, is a conventional thing, a creature of education and of civilization.

Suppose it is a legislature sitting in one of our great agricultural states and we are asking for increased appropriations and better revenue laws in order that the public-school system may adjust itself to the best thought of what it should be in order to meet the demands of the times, and we are met, as we are very likely to be met, by the statement that the farmers and the landowners will object to the tax and there is danger that it will interfere with land values. Then we might turn to these men and say:

Why, you talk of the value of this land as if you thought this value was caught up in the constituent elements of the soil, which is not so. Has not this land for eons of ages remained here, warmed by the same sunshine, wet by the same rains, above it hung the same climatic conditions, and in its soil slumbered the great giant of productivity before education and civilization touched it? But so long as the savage roamed over it and the buffalo made it its grazing ground it had no value in the sense which we are using it. Whence, then, came its value of $100, $150, or $200 an acre? A religious enthusiast, with his three caravels crossed the great Atlantic, braved its terrors and endured its hardships, and finally planted the cross of a great religion and of a great civilization on the borders of this new world. When that happened a new value attached to every square mile of territory in this wild continent, for a conventional thing, a creature of civilization and education had touched it. Later on when a mighty nation, thru discovery and conquest, had thrown about these agricultural states its arm of security, a further value came into them. No change had come in the soil nor in the character of the climate, but the establishment of a strong government had added to the value of every piece of real property. And still later on when across the Allegheny Mountains came a man on foot or horseback, down into the Ohio River valley where he saw the stretches of these prairie states, looked around, took up his claim, and drove down his stake, saying: "Here will I settle, here will I build my home, hither will I bring my wife and children, and here will I build for myself a name and a fortune"—when that happened a new value was added to every acre of ground within a radius of one hundred miles. And when over the mountains again he came with the covered wagon, his wife and the children, the horses and cattle, and some of his neighbors, and when the houses were erected and the little church reared its spire, and the school bell rang, how quickly the values of land in all the country round about advanced. No change had come in the soil, no change in its productive qualities, but the value that resides in educated minds and educated hearts, values that reside in education and civilization, had come with the men and the women and the children, and the land had increased in value.

If we are appealing to people in states which are more interested in building materials than they are in agricultural lands, the discussion may take this form:

You speak about values in building materials as if that value were a part of the thing itself and that a tax levied for educational purposes would tend to depreciate that value. In the time of the untutored savage this raw building material had no value whatever.

He was amply housed in his little wigwam. When the filth and squalor became so noisome that he could not endure it he moved to some other place. In his untutored soul there was no desire for better homes, for churches, for school buildings, for Houses of Parliament, for great public buildings. Thru the processes of education the crude desires of civilized man were changed into refined desires and he asked for himself a home, which would not only meet the mere animal needs, but which supplied comfort with a spare bedroom, with bathroom, and with the conveniences of life. Then he sought to express his refined intelligence and ideas in the form of churches and school buildings. When that time came every cubic yard of stone in the quarries from New Hampshire to California got a new value; every bit of iron caught up in the mighty embrace of nature; every running foot of lumber in the forest from Michigan to Louisiana got a new value, because thru the process of education man's desires and his appreciations and his demands had been changed. And moreover every muscle that helped to quarry the stone or mine the ore or fell the tree or fashion them into forms of usefulness or beauty, every such muscle got a new value. Every man who, thru education, has his natural powers trained into expertness in the transforming this raw material into homes and churches and schools becomes more valuable as an economic, a social, and a civic unit.

Again, let us consider the relation that education bears to the value of clothing material, either the raw or the finished product. The savage was amply clothed to meet all of his desires with a buffalo robe or a bear skin, but when thru the process of civilization and education man came to desire for himself and to demand for himself a raiment which not only met the needs of comfort and health, but which expressed his inner fancy and desire for form and beauty—when that time came every bit of cotton on the southern cotton fields got a new value; every bit of hemp and flax growing in the field got a new value; every fleece on the back of every sheep on our hillsides and pastures got a new value. There was no change in the raw material itself, but the change had come in the fancies of men, in their desires and tastes, and value projected itself into these materials. It is one thing for us to train a workman to produce a given thing and quite another for us to train people to desire the thing which is made. We may train our workmen to produce and beautify a piece of furniture, but if there has not been developed an appreciation for it and a desire for it in the hearts and minds of others the thing will have little value aside from its educational results. If we should take some of our best made things, our most useful things, our most beautiful things, the things upon which we place a great value, into darkest Africa and exhibit them before the untutored natives our scale of values would be upset. The things which we rated highest would be trampled upon by them and the things which we considered of little value or of little worth would be paramount in their appreciation.

In this simple way, without economic refinement, we may be able to make it clear that this thing which we call value, upon which taxes are levied for school revenues, is in itself mainly a creature of education and, therefore, there is nothing unjust or hurtful in levying a tax upon such values for the support of the public education.

Again it may be easily shown that the value of property is very dependent upon the safeguards that are thrown about it. Take away from property the safety that surrounds it thru civil standards and laws and its values would shrink in a night. If we could by some influence strike back our civilization to that point where might made right, if we could cancel out with one stroke the influences of schools and education, we would have to patrol our country roads with armies to protect our farms, our grain, our cattle, and our horses. We would have to fill the streets of our cities with armed constabulary to protect the wealth of homes and buildings and factories. Now in what does this security rest? Somewhat in the form of the government under which we exist and somewhat in the laws that are enacted in our national and state legislatures. But how easy it is for us to see that these laws thus enacted are of little effect unless they are enacted in the hearts and minds of children thru the process of education. You may write your laws in Washington and the various state capitols, but unless they are written in the hearts and minds and consciences of the citizens they are of no effect. There may have been a Decalog written by the finger of God upon the tablets of stone on Mount Sinai, but for me there is no Decalog until it is written upon the tablet of my own mind, heart, and conscience. There may have been a Declaration of Independence written back there in Philadelphia, but there is for me no Declaration of Independence until I have written it upon the parchment of my own soul and signed it with the consent of my own heart and own mind. You may encumber the statutes of your commonwealths with laws in the restraint of anarchy and for the protection of property, but unless these laws are written in the hearts and minds and consciences of the boys and girls and of the men and women they will be inoperative and useless. The public-school system is a great instrument for promoting and establishing good standards of citizenship and creating respect for law and order and inculcating a proper regard for property and for placing about this institution of wealth and private property its greatest safeguard.

Occasionally you will hear this statement:

> Why should I pay taxes, why should my property be taxed in order to support an institution when I have no children of my own to go to it?

The reply can easily be made: Whether you have a child which has sprung from your own loins or not, in a very true sense every boy and girl who pass your door are your son and your daughter. They can throw brickbats thru your window, they can steal your property, they can inaugurate a reign of lawlessness in your community. They can make your city and your state a byword. You are in a very true sense your brother's keeper, and what you are doing unto these you are doing unto yourself. There is no escape from it.

On another occasion you will hear some one say:

In a certain section of a certain region, the property values are low and the school equipment is poor and the children have very inadequate school facilities, but why should I be taxed to educate them. Let them take care of themselves. The children a hundred miles from here are no concern of mine.

But the children a hundred miles away from you or a thousand miles away from you are your concern. Thru the increase of our means of communication and transportation the boy born in an unfortunate region, ill-supplied with educational opportunities, and ill-trained for the duties of citizenship, tho a thousand miles away from you when the right educational opportunities were denied him, may live next door to you when he gets ready to exhibit the ugly phases of his ignorance and his prejudices. There is no escape from it. We are all in the same boat. An educated citizen is the greatest asset of the State and the Nation. An educated citizen with refined desires and tastes is the greatest safeguard of the nation. An untutored, ignorant person, with low desires and low tastes is a state and national liability. He adds little to the value of property and as a citizen easily becomes a menace both to property and to society.

After having gone far afield on this particular point, let me bring it to a conclusion by saying that in this campaign for better revenues we must go boldly before the lawmakers and taxpayers, not on bended knee or with bated breath begging for charity, but ask with reason, with faith, with courage that the various commonwealths shall support the school systems in such a way as to make them more effective instruments for establishing good standards of citizenship, raising the general level of intelligence, and increasing the working and social efficiency of its citizens, thereby adding to its wealth, its property, and its safety.

With the forthcoming of adequate revenues the school system will quickly respond to our ideas of what it should be. We shall find better buildings, better grounds, better courses of study, better length of terms, better teaching. But there is another thing which hinders the quick realization of our ideals in practice. That is the lack thruout the commonwealths of our union of competent, well-trained, expert superintendents and supervisors. There is great waste today in our educational system, a great failure to do the work we ought to do, due to this one cause. Our educational progress depends very much upon our ability to go forth in the several states before taxpayers, school patrons, and lawmakers and convince them of the value of a well-trained superintendent or supervisor over every unit of public instruction. In some districts and even in some cities the notion obtains that it is a waste of public money to employ a supervisor. The idea seems to be that with a teacher in every room the school system ought to accomplish all of its results. As a teacher in a normal school I found on the pages of a certain book two problems which were given to the classes. The first of these problems was: If one acre of ground will produce thirty bushels of wheat, how many bushels would ten such acres

produce? The answer was quickly and accurately given as three hundred bushels. The next problem was: If one man can make one chair in one day, how many chairs can ten men make in one day? Some of the hasty students gave the answer as ten chairs. Others hesitated a while and said that it would depend upon how the ten men were working, whether they worked separately or together. One student said, "If you will let me take the ten men and select from among them the one who knows the most about chair-making and let me appoint him superintendent or boss, as the case may be, and then assign each one of the remaining nine men to that part of the work which he is most capable of doing, letting this superintendent direct and co-ordinate the efforts of the other nine men—if this were done the result of the efforts of these ten men for one day might be one hundred chairs instead of ten." The value of having this one man as superintendent can be found somewhere between the difference in the value of ten chairs and one hundred chairs. It may be possible for us to show that in somewhat the same way a superintendent of a system of schools will increase the value of the work and the efficiency of every teacher therein. Some of the schools which are lagging farthest behind in the line of educational progress, which are most unresponsive to the best thought and best ideals, are those which lack any supervision whatever or which are unfortunate enough to have superintendents and supervisors who lack the fitness or the preparation or the elements of leadership. Several ladies and a boy, seven or eight years of age, were attending a concert given by Furello and his great band. The ladies were greatly interested in the wonderful work of the wonderful leader and were enthusiastic in their appreciation as he, in his matchless way, began to coax the music out of the caverns of silence, pleading with it in the most winsome way, then urging it and commanding it until it came forth in such volumes it filled the auditorium, and then turned, as it were, to drive it back, commanding with vehement gestures until you could feel the retreat into the golden silence. But the boy, interested in the many peculiar instruments, could not understand why the ladies paid so much attention to the leader, and broke forth with the following question: "Why are you talking about that fellow all the time? He doesn't make the music. All that he does is to stand up there on that box and wave his big stick. It is the men out there that make the music." In reply one of the ladies said: "It is very natural, my boy, for you to think so, but let me tell you something about that man standing on the box. Do you know that he can step down and take the instrument out of the hands of any one of ten or fifteen of those men and play it as well as he can? And do you know that that fact makes those men respect him and look up to him and watch the movement of that big stick, as you call it, in his hand? Do you know that while every one of those men out there is an artist that there would not be the kind of music that there is if that man on the box did not stand there and wave his stick? Do you know that

the artists who compose this band could not be held together in this organization unless they understood that the man who stands on the box and waves his stick is such an artist himself, so large and generous in his view and appreciation of them and their work, that they feel safe in joining themselves with him? They know that they will have a chance under his leadership to show all of their art and all of their skill." I know this is rather an extravagant illustration, but it illustrates fairly well the place in the public-school system of a trained, competent superintendent. The presence of such a superintendent or supervisor at the head of a unit of public instruction means better courses of study, greater unity in the instruction, greater co-operation of the several teachers in the various parts of the system, and a very greatly increased responsiveness of that unit of instruction to the best thought and the best ideals of what that unit of instruction should accomplish. I know that there are some superintendents, so-called, who conceive it as their function simply to sit and make life as uncomfortable as possible for the several teachers engaged in the work. That is not the kind of a superintendent I am speaking of. His or her presence in the public-school system is a millstone hanging about its neck. I am speaking of the superintendent who, having knowledge of the teaching work, who, being in sympathy with the things that are to be done, establishes the atmosphere and the conditions which will attract to the system the very best teachers, who know that whatever they are able to do will have a chance to express itself under his or her administration. I am speaking of the superintendent who, having this experience and this knowledge, will have sympathy and tact to unify the efforts of these several well-trained teachers in giving to the boys and girls the largest possible educational opportunity. I believe that this National Education Association has done much in the past years to create a sentiment for expert supervision, but our progress will not be great until this sentiment is more widely spread than it is today and we must continue the campaign which is already so well begun and so far advanced.

The last thing which prevents our practice from embodying our best theory and best judgment in public education is the presence in the public-school system of all too many immature, ill-prepared, incompetent teachers. No one can go ahead of me in his appreciation of the fidelity, the industry, the enthusiasm of the great army of teachers at work in the common schools of our nation, but after I have said all that I can in favor of the great number who are prepared by nature and by education and by training for their work I cannot avoid saying that the machinery is clogged here and there by teachers who lack the natural fitness, who lack the vision, who lack the scholastic preparation, who lack the enthusiasm of professional skill to do the work. We may appropriate money, we may supply trained supervisors, but the educational system will never respond to its best ideals, will never be actually and effectively progressive until we have placed in every school-

room of the land a teacher who by nature, in character, in personality, in scholarship, and in professional training is fit for the calling of teaching. And here, too, there is no need of blinking at the facts. If we are to work in this campaign for securing for our public-school system a better prepared teaching force, the commonwealths of the nation must realize that at least three things must be done. First of all there must be a more adequate salary provided, one that will attract the brightest and best young men and women and give them the assurance of not only a living wage, but of such financial rewards that shall translate a mere job into a calling. And when our commonwealths have arisen to that necessity we will have taken a great step in the line of progress. But there is another step to take and that is to provide abundant opportunity for these young men and women who wish to enter the calling of teaching to prepare themselves for the work. This always entails the expenditures of large sums of money to establish training schools and normal schools and higher institutions of learning in which these young people are to be prepared for their work. And this requires still another step. After we have offered such an opportunity for work and have offered remuneration that shall attract young men and young women to it, after we have given them that preparation which fits them for the work, we must see to it that our laws and legal machinery place upon them the stamp of approval, just as the professions of law and of medicine stamp upon the men and women who have made proper preparation for their work. We must say to them that,

> Having thus prepared yourselves, you may go into any part of this commonwealth, wherever there is a demand for you, and do the work of education, and so long as you show the spirit of progress, so long as you show yourselves inclined to follow some expert leadership, so long as you show yourselves growing, efficient workmen there shall not be raised any further question as to your fitness to teach.

And, with these three things adjusted—adequate revenues, expert supervision, and competent teachers—I am sure that twenty-five years from this time, when we meet in a national convention, there will be no need for one to say, and no truthfulness in it if he should say, that what we are doing in public education today is at least twenty-five years behind what we think we ought to be doing.

IN MEMORIAM—JAMES ORMOND WILSON

THOMAS W. BICKNELL, PROVIDENCE, R.I.

In the passing of James Ormond Wilson the National Education Association parts with one of the last of "The Old Guard" of the eastern states. His immediate associates in educational work were Richards, of Washington, Hagar and Philbrick, of Massachusetts, Wickersham, of Pennsylvania, Camp and Northrop, of Connecticut, White and Rickoff, of Ohio, and Newell, of Maryland, all of whom he outlived in his record of eighty-five

honorable years. A few only of those splendid pioneers of a half-century ago survive. Mowry, in New England, and that grand old man of the Central West, J. L. Pickard, are the surviving leaders in the National Education Association before the Madison meeting of 1884.

Mr. Wilson was a true educator of the best type. He was broad, liberal, brave, sympathetic. He delighted in his work as a teacher as the service of greatest value to society. Youth loved the man who carried a warm heart in a manly breast. He knew no race, class, or social distinctions. He knew men as brethren under the great Father.

Mr. Wilson was progressive, and won his successes by a frank, straightforward optimism. He accepted new ideas hospitably and indorsed new plans that called for faith and foresight. He was one of the first to indorse the formation of a National Council of Education, and, as president of the National Education Association at Chautauqua in 1880, did all that he could to install the new movement.

He was a strong, sane, healthful, hopeful man, and our national capitol, his life-long home, was the scene of his greatest works. Here he wrought and died, and his works rise up to bless the earnest workman. Presidents, senators, congresses, came and went, but James Ormond Wilson stood at the post of duty in Washington more than sixty years. He lived as a Christian citizen and educator should live. He died as a Christian hero must always die, harness on, on his eighty-sixth birthday.

> Best seemed the thing he was, and joined
> Each office of the social hour
> To noble manners, as the flower
> And native growth of noble mind.

We give the following outline of his life:

James Ormond Wilson was born in Royalston, Mass., April 2, 1825. His father was James Wilson and his mother Chloe Thursting Murdock. Robert Williams, an ancestor on his mother's side, aided in establishing the first free schools in Roxbury, Mass., in 1645 (now the Roxbury High School).

He was educated in the schools of his native town, West Brattleboro, Vt., New Salem Academy and Williston Seminary, Mass., and Dartmouth College, from which he received the degrees of A.B. and A.M.

He settled in Washington in 1848, where he conducted a private school with great success for two years, studied law, and was admitted to the bar of the District of Columbia in 1853. In the same year he was married to Sarah Ann Washington Hungerford, of Westmoreland County, Va. Then followed several years in the service of the United States government, in the Treasury Department; he received his appointment thru the influence of Daniel Webster, whose ability he appreciated and whose memory he reverenced thruout his entire life. While in office he served on the Board of School Trustees from 1862 to 1870, taking an active part in all its pro-

ceedings. In 1870 he was appointed superintendent of the public schools, and continued to hold that office until 1885, when he resigned, owing to ill-health. During that period he served as treasurer and committeeman and was elected president of the Department of Superintendence of the National Education Association in 1874, and president of the National Education Association in 1880; and was a life member of the Board of Directors. A school exhibition was sent to each of the great International Expositions of Vienna, Philadelphia, and Paris. In each case an award of the medal of the highest honor was conferred on the work of the schools and the superintendent was decorated with the Three Silver Palms of the University of France and the title of "Officer de l'Academie" by the French government during the Paris Exposition.

The schools of the District of Columbia are greatly indebted to his intelligent exertions and well-directed efforts, both as trustee and superintendent, for their present high standard of excellence. He was unusually successful in securing public interest in the schools and awakened public sentiment for the necessity of better school buildings.

The four systems of schools (the white schools of Washington, the white schools of Georgetown, the county schools, and the colored schools of Washington and Georgetown) were consolidated under one board; the pupils were classified and arranged in their present grades; industrial drawing was introduced into all the schools; in 1873, a normal school was established; in 1876 came the first high school for girls; in 1877, the first high school for boys, when military training was inaugurated; manual training in sewing, cooking, woodwork, shoemaking, floriculture, etc., were introduced into the Industrial Home Schools. The motto of his administration of the schools was a thoro mastery of a few things rather than a smattering in many. (*Non multa sed multum.*)

An editorial published on the morning of his death in reference to the naming of the new normal school "in honor, not in memory, of James Ormond Wilson," says:

> Every Washingtonian will be glad to join, in spirit at least, in the celebration today of the birthday of J. Ormond Wilson, the patron saint of the district public-school system. As trustee of the district schools from 1862 to 1870, and as superintendent from 1870 to 1885, Mr. Wilson built for himself a monument that can never be forgotten or destroyed. He organized the graded schools, and established our normal-school system. It is an appropriate though but slight recognition of his services to name the new quarter-million-dollar normal school on Harvard Street, the James Ormond Wilson School. Mr. Wilson is eighty-six years old today. Washington wishes him many happy returns.

The giving of this name to the new normal school was unprecedented, as no school buildings had ever been named for living men or women.

From 1870, Mr. Wilson was connected with many educational and charitable institutions and societies. He was among the incorporators of the Industrial Home School and the Garfield Memorial Hospital, and was an active member of the Columbia Historical Society, a trustee of the

George Washington University and the society for the Industrial Education of Colored Youths, a director of the National Metropolitan Bank, and a trustee of the New York Avenue Presbyterian Church.

Since his retirement from the School Board he had actively interested himself in affairs pertaining to education.

From 1892 to 1910 he served as secretary of the American Colonization Society, issuing each year two bulletins in the interest of Liberia.

His death occurred on April 2, 1911. He was in his usual health up to a week before, when suddenly he became very weak, and gradually grew weaker until he passed peacefully away, being unconscious only a few hours. He often said that he was sick with no disease—only with eighty-five years.

He is survived by three daughters, Miss Clara Wilson and Miss Anne Wilson, of Washington, D.C., and Mrs. Elinor Wilson, wife of Dr. A. L. Wilson, of Lynchburg, Va., and three grandchildren, Mary Hungerford Wilson, William Lyne Wilson, and Chloe Murdock Wilson.

His death comes at the end of a long and honorable career which he met like a ripe shock of wheat ready for the garner.

Out of respect to the memory of James Ormond Wilson, the president of the Board of Education ordered all flags on buildings under the jurisdiction of the school officials to remain at half-mast during the week, and the schools to be closed the afternoon of the funeral. The zeal and love shown in his philanthropic work is appreciated in the following tributes:

"In placing upon record a memorial of the death of J. Ormond Wilson, the Board of Directors of the Industrial Home School of the District of Columbia feels profoundly grateful that the grief of its members is softened by the reflection that more could not have been done than had been done by our departed friend and associate. He was an original incorporator of the institution, was for many years the president of its Board of Trustees and, from his first connection with it over a third of a century ago, he was earnest in the prosecution of its work because he loved the children committed to its care.

"Seldom does a man conspicuous in public activities, as was Mr. Wilson, find the time or possess the inclination to add to his manifold duties by assuming thruout such a large proportion of his life the added burdens and obligations of such a trust. Yet during all this period he has remained a member of its Board of Trustees, and has been active in advancing the interests of the institution, and has energetically given his time and best thought in accomplishing so much for its welfare. Until the infirmities of age only recently prevented him from attending our meetings, we have had there the benefit of his wise counsel.

"While his public educational work has commanded the admiration and gratitude of many of the men and women of the District of Columbia who were children under his administration of the public schools, it is those less fortunate ones who in their tender years have received the training and care given at the Industrial Home School, who have particularly loved and revered him and felt touched by the inestimable value of his life.

"We of the Board of Trustees, with a full realization of our loss, shall proceed with our work aided and inspired by his example and with a feeling of sincere gratitude that he was spared to us so long."

"Mr. Wilson had many friends—real friends—and this fact attests the character of the man. Only men of great heart and kindly disposition make such friends as were Mr. Wilson's. He will be remembered with affection and sincere regard by those who knew him, and the wholesome lessons taught by his school work and by his example will continue to have an influence for good in the community in which he lived so long."—Editorial *Washington Evening Star*, Monday, April 3, 1911.

"The memory of J. Ormond Wilson will always be kept green. Our public-school system will always stand as a monument to his energy and genius.

"As a special mark of recognition, our new, magnificent, normal school will bear his name. No man could ask more substantial or more lasting recognition of the part he played in advancing the cause of humanity. A school system such as ours is a greater memorial than any shaft of cold marble, however substantially and artistically turned."—Editorial, *Washington Times*, Monday, April 3, 1911.

He wrote in collaboration with his daughter, Mary Hungerford Wilson, a *Word and Sentence Book*, published in 1891 by Charles E. Merrill and Co., New York, and it is still in use. The following interesting appreciation was written by a friend and Dartmouth classmate, the late Professor John Ordronaux:

"I spent an evening over it, and was charmed as well as instructed by the ingenuity and artistic skill with which it is compiled. Such a contribution to the histology of language reflects great credit upon the author. Like the colloquies of Erasmus it will be read by thousands of children, and help to lay the foundations of English speech in their minds."

He also was the author of a monograph entitled *Eighty Years of Public Schools* (1805–85), that appeared in the report of the Commissioner of Education in 1894. Mr. Wilson delivered it before the Columbia Historical Society.

DEPARTMENT OF SUPERINTENDENCE

MOBILE MEETING, FEBRUARY 23–25, 1911

SECRETARY'S MINUTES

FIRST DAY

MORNING SESSION—THURSDAY, FEBRUARY 23, 1911

The Department of Superintendence of the National Education Association met in the Lyric Theatre, Mobile, Ala., at 9:30 A.M., President William M. Davidson, superintendent of instruction, public schools, Omaha, Nebr., presiding.

The session opened with a piano duet, after which were short addresses of welcome by Albert P. Bush, president of the Mobile Chamber of Commerce; P. J. Lyons, Mayor of Mobile; and S. S. Murphy, superintendent of schools of Mobile. The response was made by President Davidson.

The program of this session was as follows:

Topic: A Message of Achievement from the Southland

1. "The Progress of Its Schools"—Henry J. Willingham, state superintendent of education, Montgomery, Ala.
2. "The Ideals of Its People"—Joseph M. Gwinn, superintendent of city schools, New Orleans, La.
3. "The Glory of Its Children"—Lawton B. Evans, superintendent of schools, Augusta, Ga.

In Memoriam: WARREN EASTON—James Benjamin Aswell, president, State Normal School, Natchitoches, La.

WILLIAM WALLACE STETSON—Payson Smith, state superintendent of public schools, Augusta, Maine. (Read by Mason Stone, state superintendent of education, Montpelier, Vt.)

At the close of the morning session President Davidson announced the following committees:

COMMITTEE ON NOMINATIONS

A. E. Winship, editor, *New England Journal of Education*, Boston, Mass.
Homer H. Seerley, president, Iowa State Teachers' College, Cedar Falls, Iowa.
Guy Potter Benton, president, Miami University, Oxford, Ohio.
S. S. Murphy, superintendent of schools, Mobile, Ala.
Samuel Hamilton, superintendent of public schools, Braddock, Pa.

COMMITTEE ON RESOLUTIONS

A. H. Waterhouse, superintendent of schools, Fremont, Nebr.
Mason S. Stone, superintendent of education, Montpelier, Vt.
Leonard P. Ayres, secretary, Russell Sage Foundation, New York, N.Y.
James B. Aswell, president, State Normal School, Natchitoches, La.
Charles E. Chadsey, superintendent of schools, Denver, Colo.

AFTERNOON SESSION

At 2:30 P.M. President Davidson called the meeting to order, and after a piano solo by Miss Ruth Rosenbaum, the following program was presented:

Topic: The Present Status of Education in America

1. "In the Elementary Schools"—Ella Flagg Young, superintendent of schools, Chicago, Ill.
2. "In the Secondary Schools"—Ellis U. Graff, principal of high school, Omaha, Nebr. (Read by J. A. Doremus, superintendent of schools, Auburn, Nebr.)
3. "In the Colleges and Universities"—Guy Potter Benton, president, Miami University, Oxford, Ohio.

General Discussion—Leaders: S. L. Heeter, superintendent of schools, St. Paul, Minn.; John W. Abercrombie, president, University of Alabama, University, Ala.

"Preliminary Report of the Committee on Uniform Reports and Records"—George D. Strayer, professor of educational administration, Teachers College, Columbia University, New York, N.Y.

Discussion—Leaders: Elmer Ellsworth Brown, United States Commissioner of Education, Washington, D.C.; William H. Allen, director, Bureau of Municipal Research, New York, N.Y.; Willard S. Small, principal, Eastern High School, Washington, D.C.

EVENING SESSION

The evening session was called to order at 7:45 o'clock, President Davidson presiding.

Owing to the unexpected absence of Bishop Gailor, who was to deliver the address, brief addresses were given by the following:

Henry Suzzallo, professor of philosophy of education, Teachers College, Columbia University, New York, N.Y.

Ella Flagg Young, superintendent of schools, Chicago, Ill.

John MacDonald, editor, *Western School Journal*, Topeka, Kans.

James B. Aswell, president, State Normal School, Natchitoches, La.

SECOND DAY

MORNING SESSION—FRIDAY, FEBRUARY 24, 1911

The meeting was called to order by President Davidson at 9:30 A.M. After a vocal solo by Miss Mattie Gusman, the following program was presented:

Topic: Our Educational Advance and Improvement over the Past

1. "In City"—Charles E. Chadsey, superintendent of schools, Denver, Colo.
2. "In State"—Charles P. Cary, state superintendent of public instruction, Madison, Wis.
3. "In Nation"—Elmer Ellsworth Brown, United States Commissioner of Education, Washington, D.C.

General Discussion—Leaders: Leonard P. Ayres, secretary, Russell Sage Foundation, New York City; J. George Becht, principal, State Normal School, Clarion, Pa.; M. L. Brittain, state superintendent of public instruction, Augusta, Ga.

"Report of Committee on Economy of Time in Education"—Henry Suzzallo, professor of philosophy of education, Teachers College, Columbia University, New York City.

The annual business meeting followed the program.

Several invitations were presented for the meeting in 1912, and it was voted to hold that meeting in St. Louis, Mo.

The report of the Committee on Nominations was as follows:

For *President*, Charles E. Chadsey, superintendent of schools, Denver, Colo.

For *First Vice-President*, O. J. Kern, superintendent of schools of Winnebago County, Rockford, Ill.

For *Second Vice-President*, H. J. Willingham, state superintendent of public instruction, Montgomery, Ala.

For *Secretary*, Harlan Updegraff, Bureau of Education, Washington, D.C.

The report was unanimously adopted and the nominees declared elected.

The report of the Committee on Resolutions followed:

REPORT OF THE COMMITTEE ON RESOLUTIONS

Resolved:

1. That this Department recognizes the steadily increasing value of the United States Bureau of Education in gathering and making available educational facts and statistics.

It recalls with satisfaction the prominent part taken by this Department nearly half a century ago in bringing about the creation of the Bureau of Education.

It endorses the earnest efforts that members of this Department and other friends of education are making to further increase the usefulness of the Bureau as defined by the organic act under which it exists, and hereby authorizes the outgoing president of this Department to appoint a committee of five, of which he shall be chairman, to be known as the Committee on the Bureau of Education, which shall co-operate with the similar committee of the National Education Association in furthering the interests of educational progress thru the United States Bureau of Education.

2. The question of the extension of the amount and the character of federal aid given to education is assuming great importance and demands the earnest consideration of all interested in education. This Department recommends that this question be given a place upon the next program of the Department.

3. It is the sense of the Department of Superintendence that uniform school records and reports are essential to the intelligent comparison of school systems for the purpose of increasing the efficiency of educational administration. It therefore recommends the adoption by school authorities of the forms of record and reports as submitted by its Committee on Uniform School Reports, provided that said forms shall be modified and improved as may be found expedient from year to year by conference of the United States Bureau of Education, the Bureau of the Census, the National Association of School Accounting Officers, and the Committee on Uniform School Records and Reports of the Department of Superintendence.

4. The Department of Superintendence recognizes that the present lack of uniformity in nomenclature found in texts in English grammar is confusing and unnecessary. It therefore authorizes the president of this Department to appoint a committee of five to formulate and report at the next annual meeting of this Department a system of nomenclature for texts in English grammar, and recommends that publishers of such texts use this system if adopted by the Department.

5. The Department of Superintendence approves of the use of school buildings as community centers and recognizes in this movement a socializing force of immense significance. Genuine increase in efficiency is possible only where there exists the heartiest co-operation on the part of all agencies aiming at social advancement. The establishment during recent years of many organizations and societies devoted to the solution of various specific educational and social problems is most encouraging to all devoted to the public.

6. The Department is most heartily in sympathy with the policy of the Bureau of Indian Affairs to promote and encourage the attendance of Indian children in the public schools, and authorizes the outgoing president to appoint a committee of five to investigate the present conditions of the Indians with reference to their relation to the public schools for the purpose of determining what co-operation or supplemental work is practicable.

7. The thanks of this Department are hereby expressed to the local committee, the press, and to all concerned for the many courtesies shown to the officers and members of the Department.

Respectfully submitted,

A. H. WATERHOUSE, *Chairman*
LEONARD AYRES
MASON S. STONE
JAMES B. ASWELL
CHARLES E. CHADSEY
Committee

The report of the Committee on a Universal System of Key Notation was then read by Homer H. Seerley, president, Iowa State Teachers' College, Cedar Falls, Iowa.

It was voted that the report be adopted and the committee discharged.

Henry C. Cox, district superintendent of schools, Chicago, offered the following resolution, which was seconded by E. O. Vaile, of Oak Park, Ill., and adopted.

Resolved, That a committee of five be appointed by the chair to bring the report on a Uniform Key Alphabet before the active members at the San Francisco meeting, to urge in behalf of the Department of Superintendence the adoption of a resolution declar-

ing the needs of uniformity of our key notation for indicating pronunciation in our cyclopedias, dictionaries, textbooks, and all other publications, and endorsing for that purpose the key alphabet just adopted by the Department of Superintendence.

AFTERNOON SESSION—2:30 P.M.

The afternoon was devoted to the respective round-table conferences, with programs as follows:

(A) ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

Leader—John Grant Crabbe, president, State Normal School, Richmond, Ky.

Topic: A Story of Achievement and Endeavor in Co-operation

(*a*) "The State Superintendent, the Educational Commission, and the Legislature"—E. T. Fairchild, state superintendent of public instruction, Topeka, Kans. Discussion by John W. Zeller, state commissioner of common schools, Columbus, Ohio; J. J. Doyne, president, State Normal School, Conway, Ark.; and Harlan Updegraff, Bureau of Education, Washington, D.C.

(*b*) "The County Superintendent and the Rural Communities"—Miss Edith A. Lathrop, county superintendent of schools, Clay Center, Nebr. Discussion by Lawton B. Evans, superintendent of schools, Augusta, Ga., and A. L. Cook, county superintendent of schools, Baltimore, Md.

(*c*) "The State Superintendent and the People—The Educational Campaign"—Charles G. Maphis, secretary, Virginia Educational Commission, Charlottesville, Va. Discussion by McHenry Rhoads, superintendent of schools, Owensboro, Ky.

(*d*) "The State Superintendent, the County Superintendent, and the State Normal"—Charles P. Cary, state superintendent of public instruction, Madison, Wis. Discussion by James B. Aswell, president, State Normal School, Natchitoches, La., and J. Frank Marsh, supervisor of institutes and publications, department of schools, Charleston, W.Va.

(*e*) "The State Superintendent and the General and Southern Education Boards"—George B. Cook, state superintendent of public instruction, Little Rock, Ark. Discussion by P. P. Claxton, professor of education, University of Tennessee, Knoxville, Tenn., and Elmer Ellsworth Brown, United States Commissioner of Education, Washington, D.C.

(B) ROUND TABLE OF SUPERINTENDENTS OF LARGER CITIES

Leader—John H. Phillips, superintendent of schools, Birmingham, Ala.

Topic: Some Problems of Economic School Administration

(*a*) "Economic Aspects of Organization and Courses of Study"—F. B. Dyer, superintendent of schools, Cincinnati, Ohio.

(*b*) "Methods of Classification and Standards of Promotion in Their Relation to Retardation"—J. A. C. Chandler, superintendent of schools, Richmond, Va.

(*c*) "The Problem of the 'Repeater'"—James H. Van Sickle, superintendent of schools, Baltimore, Md.

(C) ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

Leader—E. E. Scribner, superintendent of schools, Ishpeming, Mich.

Topic: Unity of Ideals and Purposes in Teachers

(*a*) "As Gained from Professional Training"—A. C. Thompson, principal, State Normal School. Brockport, N.Y. Discussion by Mrs. Eulie G. Rushmore, Northern Normal School, Marquette, Mich.

(*b*) "As Gained from School Supervision"—E. C. Warriner, superintendent of schools, Saginaw, Mich. Discussion by George A. Works, superintendent of schools, Menomonie, Wis.

(*c*) "As Gained from School Administration"—Mrs. Sarah E. Hyre, member of Board of Education, Cleveland, Ohio. Discussion by L. L. Wright, state superintendent of public instruction, Lansing, Mich.

EVENING SESSION

The meeting was called to order at 7:45 P.M. by President Davidson.

After a violin solo by Miss Aline Rosen, George E. MacLean, president of the State University of Iowa, Iowa City, Iowa, gave an address on "An Educational Epoch in New America."

The session closed with a vocal solo by Mrs. C. B. Hervey.

THIRD DAY

MORNING SESSION—SATURDAY, FEBRUARY 25, 1911

The Department was called to order at 9:30 A.M., and the following program was presented:

Topic: The Coming of the Humane Element in Education

Music: Song by pupils of the public schools.

1. "The Open-Air School"—Sherman C. Kingsley, general superintendent, United Charities of Chicago, Chicago, Ill.
2. "The Training of the Mentally and Physically Unfortunate"—Leonard P. Ayres, secretary, Russell Sage Foundation, New York, N.Y.
3. "The Peace Movement and the Public Schools"—Mrs. Fannie Fern Andrews, Boston, Mass.
4. "Education of the American Indian"—H. B. Peairs, supervisor in charge of Indian Schools, Lawrence, Kans.

"Report of the Committee on the Mexican Centennial"—Horace H. Cummings, general superintendent, Latter Day Saints Schools, Salt Lake City, Utah.

After the program, President Davidson announced the following committees:

COMMITTEE ON ECONOMY OF TIME IN ELEMENTARY EDUCATION

Calvin N. Kendall, superintendent of schools, Indianapolis, Ind., *Chairman.*
Charles S. Meek, superintendent of schools, Boise, Idaho.
Frank E. Spaulding, superintendent of schools, Newtonville, Mass.
Ernest O. Holland, superintendent of schools, Louisville, Ky.
J. H. Francis, superintendent of schools, Los Angeles, California.

This committee is to co-operate with the committee of the National Council on the same topic.

COMMITTEE ON UNIVERSAL SYSTEM OF KEY NOTATION

James H. Van Sickle, superintendent of schools, Baltimore, Md., *Chairman.*
J. A. Shawan, superintendent of schools, Columbus, Ohio.
Ben Blewett, superintendent of instruction, public schools, St. Louis, Mo.
Livingston C. Lord, president, State Normal School, Charleston, Ill.
Vernon L. Davey, superintendent of schools, East Orange, N.J.

COMMITTEE ON UNIFORM NOMENCLATURE IN ENGLISH GRAMMAR

C. R. Rounds, State Normal School, Whitewater, Wis., *Chairman.*
Ella Flagg Young, superintendent of schools, Chicago, Ill.
Stratton D. Brooks, superintendent of schools, Boston, Mass.
A. F. Lang, head of Department of Education, University of California, Berkeley, Cal.
Henry F. West, assistant superintendent of schools, Baltimore, Md.

AFTERNOON SESSION

The last session of the Department was called to order at 2:30 P.M., President Davidson presiding. The following program was given:

Topic: The Progress and the True Meaning of the Practical in Education

Music: Selections by the Misses Sterling.

1. "In Agriculture"—P. G. Holden, Iowa State College, Ames, Iowa. Discussion by E. E. Balcomb, Department of Agriculture, State Normal School, Providence, R.I.

2. "In Vocational Training"—Carleton B. Gibson, president of Mechanics Institute, Rochester, N.Y. Discussion by Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.

3. "In the Balanced Course of Study, and the All-Year-Round Schools"—G. W. A. Luckey, Department of Education, University of Nebraska, Lincoln, Nebr.

At the close of the program the meeting adjourned.

ARTHUR DEERING CALL, *Secretary*

PAPERS AND DISCUSSIONS

TOPIC: A MESSAGE OF ACHIEVEMENT FROM THE SOUTHLAND

A. THE PROGRESS OF ITS SCHOOLS

HENRY J. WILLINGHAM, STATE SUPERINTENDENT OF EDUCATION OF ALABAMA, MONTGOMERY, ALA.

This is an easy subject. Everybody likes to talk about what he has done and usually very few people are interested in hearing him tell about it.

We in the South are willing to admit that ours is the best part of the United States, and that fact makes it the garden spot of the world. There are many evidences that this country in the Southland was the final and crowning work at the hands of the Creator.

In referring to the progress of the schools of the Southland, dealing with a subject which covers nearly a million square miles, I shall necessarily be confined to broad and general terms.

In 1865 the people of the South found for themselves more to do and less to do with than any other people in the history of the world. On every hand was utter destruction. All was gone save honor and hope. Our remnant of men who had not been left on the battlefield found it necessary first to rebuild their homes before they could rebuild their schools.

Previous to that time, thru the training received in their academies and seminaries and colleges and universities, the well-to-do and the great middle class in the South had been directing, in a large measure, the affairs of the nation. Our people, except those known as the "poor whites," were prosperous, contented, and happy. Whatever else the Civil War may have done, it created the equality of opportunity for all our people and resulted in the establishment of a real system of public education maintained for all alike. While removing the ashes to begin the erection of new schoolhouses and higher institutions of learning it was realized for the first time that ours must be a dual system—one system for the white

children and anotl er system for the negro children. Why this was so at that time, why it is still so, and why it will be so a hundred years hence, need not be discussed here today. Reference is made to our dual system of education only for the purpose of pointing out one of the difficulties peculiar to this section. I am happy in the belief that this difficulty will always be one of the educational problems of the South; because, under the directing hand and the wise counsel of native white men, the negro, as a race, must work out his own civilization. Looking back thru the period of years during which the South has been developing and maintaining a system of public education we find much cause for rejoicing and for making us to look with hope and good cheer toward the future.

In the olden days a child's education was thought to be a matter wholly within the discretion, and subject to the financial means and also to the inclination, of his parent. We have come now to know that the public welfare requires a proper education and a suitable training of all the children at the public expense. Furthermore, the recognition of this fact has caused about half the southern states to take the additional step of requiring the parents to send their children to school, and within a few more years the seven remaining southern states will write upon their statute books a compulsory-attendance law just as it is now in every state of the North, the East, and the West. In those days private schools were the dependence for the instruction of the children in the common branches. Now free public schools supported by taxation dot the South in reach of every child. In those days academies and seminaries were maintained for the few. Now there are hundreds of public high schools thruout each of the southern states and open to all alike. In those days denominational colleges were expected to provide in a large measure for the higher education of a limited number. Each southern state is now spending millions in providing for the higher education and for the technical training of the many. In those days three bales of cotton and one hundred bushels of corn could be obtained from the work of one mule in cultivating twenty acres. Now we can grow three bales of cotton on one acre and one hundred bushels of corn on another acre by means of the scientific methods taught in our agricultural colleges. In those days an education was considered necessary only for those boys who were to enter one of the professions. Now the South knows that a proper education and a suitable training are indispensable to the highest degree of success in any of the vocations of life as well as the professions, and therefore we are beginning to make provision for the industrial training of the children of the Southland.

About every ten years the states of the South approximately double their investment in public-school buildings. This ratio of increase is approximately maintained also in the total amount expended on public education. The good example set by other states of making large investments in the cause of public education is beginning to have a good effect

on the states of the South. Nature was so lavish in her gifts to this section in soil and in climate, in water and in mineral, in field and in forest, that our people may have been somewhat excusable in not fully realizing the necessity of providing ample educational facilities for their children.

During most of the period since the South began constructing a system of public schools our people have depended largely on the state governments to furnish the revenue. In recent years most of the southern states have come to know that while the state as a unit of government should furnish its part by taxation for the maintenance of a system of public education, the county as a unit should furnish its part and the school district should furnish its part. You, my fellow-teachers, from the North and from the East and from the West, come from sections where the smaller divisions like the district and the county raise by taxation the greater part of the revenues for the support of the public schools; but we in Alabama, the home of William L. Yancy, have been such strong "States' Rights Democrats" that we believed in letting the state do nearly everything, while we as individuals returned the favor in full by continuing to vote the Democratic ticket. We now realize that democracy and home rule ought to have taught us long ago to let the counties and the school districts assist the state government in maintaining a system of public education.

These brief, passing references bring to our minds a review only of those greater movements in educational developments which have transformed the Old South into the South of today. These changes, these evidences of marvelous growth, inspire us with hope and courage and confidence for the future. Of achievement, the schools of the Southland could sing a wondrous story; but they look not to the past, they look to the future.

Another cause for gratification is the fact that all our educational problems and our educational institutions may be unaffected in future by sectional lines; because all sectional lines are wiped out now. They are always wiped out every time the North and the South participate in a public meeting. The latest proof that those sectional lines are almost completely obliterated was offered a few days ago when the metropolis of the South, New Orleans, situated almost in sight of the Panama Canal, was really seriously considered as a competitor with San Francisco, three thousand miles away, as the "logical point" for holding the Panama Exposition.

Another important fact in connection with the growth of education in the South is the apparent admission on the part of most of the philanthropists of the North that the native white man of the South understands the negro better than they do. In providing for the negro youth a common-school education together with an industrial training we earnestly desire the sympathy and co-operation of the North, but not its advice. We welcome its benefactions, but not the absolute direction of these expenditures.

You of the North and you of the East and you of the West have your problems of foreign immigration. We sympathize with you, but we know you can solve these problems better without our advice. We are not familiar with the difficulties, while you are. Why should we of the South undertake to advise you on a subject which from the very nature of things you know more about than we do? In like manner we probably understand better than you do the problems of the South.

But best of all, my brothers, we are coming really to understand and to appreciate each other. We of the South and you of the North are coming to feel that your heroes and our heroes are the heritage of a common country. The deeds of your brave men and of our brave men, of your chieftains and of our chieftains, are transmitted as a glorious legacy to the children of America. To the keeping of the American school-teacher is committed not only the destiny of individuals but the ideals of the nation. May he be true to his trust and equal to his responsibility.

B. THE IDEALS OF ITS PEOPLE

JOSEPH M. GWINN, SUPERINTENDENT OF SCHOOLS, NEW ORLEANS, LA.

It was a great son of the South who in 1776 penned that immortal Declaration which proclaimed to the world the ideals of a new nation and set Liberty Bell ringing thru all times and to all lands the notes of freedom, liberty, the rights and powers of the people. Eleven years later another great son of the South wrote, "We, the people of the United States." While he wrote representing the whole people he had behind him a southern ancestry and training and was influenced by southern ideals and traditions. Owing to the strength of the South at the time of the Constitutional Convention, and owing to the character of the men who represented the southern colonies, the expression of political ideals set forth in the Constitution was dominantly southern. Southern thought and southern ideals played leading parts in laying the foundation and in raising the superstructure of our nation.

We, the people of the South, are of the people of the United States and hold with you of the East and North and West those ideals which have given individuality and character to this nation and made it a power for good in the world and which have directed the course of our national life and made the form of our government a model for other nations to imitate.

The South has held these national ideals more sacred and inviolate than any other section of the country, for the South is essentially conservative and holds dear the foundation principles enunciated by the makers of the Constitution and applied by the builders of our nation. It has cherished and kept these ideals and its people have ever been ready to live and labor or fight and die, if need be, for their protection and maintenance.

In times past to some the South has seemed a problem and its people a

peculiar people. To these the North has appeared to represent the nation. It is true, due to causes well known to all, that no southern man has been the executive head of the nation in many years, but it should be recalled that before 1860 nine of the fifteen presidents were from the South and in other branches of the national government the South contributed its due share of leaders. But a better day dawns, when the South shall come again into its own in national leadership and be represented in the highest offices in the government. The next Speaker of the House is a man of southern blood. Within the past few weeks a great son of Louisiana has been appointed head of the national judiciary by a great son of Ohio. The American ideals—they are the ideals of the people of the Southland.

The ideals of the people of the South! A mighty theme, its vastness appalls me as does my inability to treat it in any adequate way in this brief paper. For the South is a mighty empire stretching from beyond the Potomac to far El Paso, from the Ohio to the Florida Keys, with a population of 30,000,000. Geographically, the South is diverse with its Coastal Plain, Appalachian region, great and alluvial river valleys, and wide prairies and plateaus; with its cotton areas, its tobacco areas, its sugar areas, its rice and tea areas, its corn areas, its great forests, and wealth of coal and iron and petroleum. Historically, the South is no less complex with its Colonial period, the Ante Bellum period, the period of War and Reconstruction, and the New South, which is just now emerging with a wealth of ideals inherited from each epoch of the Old South. A history, long, complex, romantic, and tragic, wrought by a people of many nationalities and of different bloods, by Cavaliers of Maryland and Virginia, Huguenots of the Carolinas, the Scotch-Irish of the mountain and interior states, the Spanish from Florida to Mexico, the French of all this lower coast and especially of Louisiana, the Germans in Texas, by thousands of Indians and millions of negroes.

The South believes that differences exist among men due to nature, to economic and social conditions, and to social heredity, and that these differences should be recognized in the treatment of the different classes. These differences are recognized in most countries of the earth, including the leading nations of western Europe. An erroneous conception of democracy and a faulty psychology have led a portion of the people of our country into an attempt to treat all men alike. The Indians must be given the white man's education and social order and transformed into white Indians. That the Indian is not a white man with a red skin has been learned at an enormous cost in dollars and a frightful waste of energy and life. When the negro slaves were freed, they became, to some, white men with black skins, so that all that was needed to make them equal to the whites was to give them the white man's privileges and the white man's education. This attempt has likewise failed. The same faulty notions led to an attempt to give the country child the same education as the city child, the trades-

man's son the same as the son of his rich employer, the girls and women the same education as the boys and men, the illiterate adult the same as the child in the first grade. The failure of all these attempts, together with the teachings of modern psychology and sociology, has brought the whole country to accept the doctrine that differences do exist among men and that men should be treated accordingly.

While the South has not been free from mistakes in education it has stood for vocational education, for agricultural schools in the country, for differences in education due to sex, and, in the main, for separate colleges for men and women, and for an education for the negro suited to his nature and social and economic needs.

Eighty-five per cent of the people of the South live in the country and by farming. Their ideals are naturally the ideals of field and farm. Conditions in the North tended toward commerce, toward organization, toward cohesion and centralization, and toward the development of great cities and the submergence of the individual. In the South, due to separateness on farms and plantations and the absence of great cities, the tendencies were toward individualism and guarding rights.

Measured by the standard of dollars, the South has lagged behind. But the South has not cared so much for storing up wealth. "The South," says Dixon, "is raising men rather than money." Channing said, speaking of the Virginians, "They love money less than we do. . . . . Patriotism is not tied to their purse strings." The South has been criticized for being slow, for lacking the hurry and bustle of the North and West. The South takes time to cultivate those individual graces and social virtues which have made the southern woman and the southern man famous the world over and purchased for the South a reputation for unequaled hospitality. It is a wealth of worth rather than a worth of wealth that is characteristic of southern ideals. To be able to produce a character like that of Robert E. Lee is esteemed of greater importance than to produce an army of millionaires.

The South stands for the development of the individual, for his integrity, for the individual's personal worth. This individualism is needed in social progress to oppose the centralizing tendency of the North.

A kindred ideal for which the South stands and has stood thru all the years is that of local self-government. This Anglo-Saxon principle is dear to our hearts. Of it President Dabney says, "The South's best contribution to the cause of democracy was its ideal of local self-government." With this ideal goes the ideal of the integrity of the state. The people of the South stand and have stood for the indestructibleness of the states and for their rights to govern themselves. The war between the states settled once for all that this is to be "an indestructible union of indestructible states."

Life on the farms and plantations tended to magnify the home. The

planter belonged to an aristocratic class and was proud of the blood in his veins. The plantation afforded all the necessities of life and many of the luxuries, so that life in the plantation home was almost ideal. The ideal of home is strong in the Southland, family ties are close, and social position and leadership depend more on one's family than on wealth or political or professional position. If the home is a mighty influence for good in the preservation of a nation, the Southland has contributed and will contribute more than its share.

With the love of home and family naturally goes a reverence for the past. For

> . . . . in the land ob cotton,
> Old times dar am not forgotten. . . . .

No, old times are not forgotten in the South. Thousands of families lost their wealth during the War and have never been able to regain the standards of living to which they were accustomed. To all such the glorious days of the distant past are sacred memories. In wealth and in the strength of her manhood the South is just now abreast of the mark she had reached in 1860. Many states have lost rank which they can never regain. Under these circumstances it is but natural that old times should not be forgotten. Then there were great principles contended for by our fathers, and national leaders went up from the South and great names were common in those days. Why should the South forget the glories of the past? It is learning to forget many of its dark hours, but it will never forget its heroes and the principles for which they stood.

The South is said to be conservative and exclusive and more or less suspicious of strangers. If the South were ever suspicious of strangers that day is now past. If this suspicion existed it was pathological and absolutely foreign to native southern character, for the typical Southerner is of simple and straightforward mind, with an open-handed hospitality unsurpassed. While the South is loyal and true to its friends, the warmth of its welcome and the genuineness of its hospitality to strangers stand out as conspicuous expressions of the ideals of her people.

During the dark hours of the War and the darker days of Reconstruction the South had many experiences with strangers which taught her that strangers meant danger. The attempt to force a solution of southern problems by a method and on a pattern foreign to southern ideals and experiences crystallized the South into the "solid" South and dried up for a season the natural springs of hospitality in southern breasts. But the North has learned that these problems cannot be so solved and that southern men with southern methods must work them out. Force has been replaced by education and by constitutional provisions regulating the franchise. Thus peace, security, prosperity, and an opportunity to develop in its own way have been guaranteed to each race. This has put the South at ease and has started again the native springs of hospitality to strangers. Rooted

in the old stock and out of the richness and grandeur of the Old South thru the travail of the changing years the New South is born. She stands with open arms and gives the warmest welcome and offers the richest opportunities to strangers from all lands and especially to the sons of the North who wish to come to find a home. And they are coming by the hundreds and thousands, buying farms, building factories, directing and developing industries, and furnishing a supply of superior labor. Let them come in increased numbers for their good and for ours! We fear no strangers, for, as Thomas Nelson Page says of the South, "There is something in the air which charms all who come within her borders." "Let men but breathe the air of the South and they are Southerners forever." When men become Southerners they are no less Americans and especially so now, for the New South is filled with the spirit of nationalism—not a new spirit but a revival of the spirit of the old South of Washington and Madison, of Marshall, of Jefferson and Jackson. The spirit of sectionalism has passed. A significant thing occurred in New Orleans and in other cities of the South ten days ago. Lincoln's birthday was celebrated by the closing of the banks and the cessation of business by the commercial exchanges. The spirit of nationalism shines with undimmed splendor in the galaxy of southern ideals.

The political rather than the commercial and industrial aspects of society have been emphasized in the Southland. The average Southerner is likely to be considerably interested in politics, and politics play a large part in community life. The southern youth is taught that it is his duty to take an active part in politics and he is instructed in the party principles from boyhood. Rhetoric and oratory are natural concomitants of this emphasis on politics, and the ability to make a rousing speech dealing in generalities is of more importance than an ability to present the detailed facts or make a scientific research and exposition.

In no field has the South achieved more than in the realms of its educational ideals. The story of the rise of our present-day ideals needs not to be rehearsed by me, for the ideals are best seen in what has been done and is being done. Educational ideals are being made real at a greater rate in the South than elsewhere. The marvelous achievement of the schools of the South, when all the facts are kept in mind, is a theme every southern man delights to discuss. The facts of educational achievement and progress have been ably presented to you today by the state superintendent of this state. It is therefore not necessary for me to dwell on our educational ideals. I need but reiterate that a system of free public schools open to all, of whatever race, and giving to each the amount and kind of education best suited to his nature and needs, is the ideal of the people of the South.

The people of the Southland believe that this life is worth living and that one should take time for enjoyment; time for social intercourse, for feast days and festivals; that one should be happy and whole-hearted and

not permit the pressure and grind of wealth-getting to crush all the brightness and sweetness out of life. With this ideal goes emphasis on excellence of manners and a warmth of hospitality unsurpassed. The Southerner knows how to select a good dinner and he has sense enough to take time to enjoy it. He is a master of the art of conversation; he loves music and art and all other means of wholesome enjoyment. If he lacks somewhat in persistence, in application to business, he possesses the grace of living and the ability to enjoy the good things of earth.

This meeting, I am told, is to be one of hope, of optimism, for the recounting of the good that has been done rather than for the parading of faults and failures. This being true, it is not becoming that I should mention our mistakes and shortcomings. The people of the Southland make no claim to perfection, for failures and shortcomings are many, but we know you will draw over them the mantle of charity and hold to us the hand of a brother to aid us to overcome them.

While the war between the states was a physical defeat for the South, in many respects it was a spiritual victory. It saved to the nation the principle of local self-government and the indestructibility of the states. The South has developed the individual as a bulwark against the centralizing tendencies of the North and so contributed one of the two essential elements in social progress. It has held fast the graces and virtues of the individual and produced the man of worth as complementary to the captain of industry. In many ways the South has perpetuated and developed the ideals needed by our country in its proud course at the head of the nations of the earth in establishing a world peace and brotherhood of man in a true democracy.

Thru the ages past till now the star of empire has taken her course westward. The circuit of the earth is now complete and around the shore of the Pacific the civilization of the Western world has met that of the Orient. In the meantime man has conquered the equator and marked out a new course for the progress of that star. The opening of the Canal will put the South on the highroad of the world whether east and west or north and south. The mighty Father of Waters courses his way southward and calls the commerce of the world to ride on his bosom. Millions of fair acres of inexhaustible richness lie waiting a tenant. Hospitable doors stand wide to welcome strangers. The tide of immigration has already set in, and the industrial development of the South is at hand. Southward the star of empire takes her course, and, with wealth created adequate to meet the needs for the development of her ideals, the Southland will come into the heritage that a prodigal nature has left her in store.

C. THE GLORY OF ITS CHILDREN

LAWTON B. EVANS, SUPERINTENDENT OF SCHOOLS, AUGUSTA, GA.

So long have speakers been accustomed to apologize for conditions in the South, to explain why they are not better, to deplore the lack of educational interest among the people, that one has naturally come to expect, upon any occasion when the educational interests of the various parts of our country are under consideration, to see a self-satisfied smile of glorious achievement from the East, to hear a roar of exulting greatness from the West, and a meek apology from the South.

But now the South needs no longer to apologize. The record of its growth and achievement in every particular of commercial, agricultural, industrial, and educational enterprise is at once a source of pride to its citizens and of gratification to its friends. The difference between ten-cent cotton and thirteen- to fifteen-cent cotton has meant a difference of one hundred and seventy-five millions of dollars in favor of the southern farmer. The increase of the number of cotton mills in the south, the increase in the output of coal and pig iron, the growth of the fruit and vegetable industry, all have so greatly increased in the last few years that the wealth of the South is now to be taken into account.

A capitalist of a western city recently said in my hearing at a dinner that time was when the South clamored to borrow money at any rate, but now the southern farmer and manufacturer not only did not need to borrow money, but actually had money to lend.

The improvement in agricultural conditions in the South is one of the most hopeful signs of its prosperity. With the coming of the rural mail delivery, the extension of the long-distance telephone system, the improvement of country roads, and the possibility of the motor-driven wagon, the southern farmer finds himself in daily contact with market reports, in instant communication with commercial centers, and with easy means of delivering his products. In the state of Georgia as many as five thousand miles of improved rural roads have been built in the past few years, reducing the cost of hauling from twenty-three cents per ton per mile to nine cents. What is true of Georgia is true the South over.

We still invite our friends to come and spend their millions in the South. The water power going to waste sings its song to the cotton field along its banks and prophesies of still another mill before the season is over; the breeze shakes the pine forests and they murmur of ship timber and naval stores; the birds call from truck farm to peach orchard; and the coal turns over in its bed and says to the iron sleeping by its side, Let us be up, for the long, dreary night is over and it is now the broad daylight of prosperity in the South.

And for all this possibility of a greater South we are now rearing a generation of children whose eyes are no longer set back to the past glories of their

fathers, but whose minds take hold of the present, and whose eyes behold the future, and whose hands are trained to skilled labor.

The latest available statistics furnish some interesting facts about the distribution of children. Where the population is the densest the percentage of school children is the smallest. In the North Atlantic states, where the population is 130 to the square mile, the school population is 24.4 per cent. In the Southern states generally, where the population is about 30 to the square mile, the school population is 32.8 per cent. In the North generally, one-fourth of the population is of school age. In the South generally, nearly one-third of the population is of school age. Rhode Island, having 407 persons to the square mile, has 23.5 per cent of them of school age, less than one-fourth. South Carolina, having 44 persons to the square mile, has 34.6 per cent of them of school age, over one-third.

I believe it can be safely assumed that, family for family, there are more children around the hearthstone of a southern home, especially if that home is a cabin, than there are in a nursery of a northern home, especially if it is a brownstone front. Henry Grady said somewhere that the farmer's home was as full of children as the nests were of birds, and if I should be asked to say what is the glory of the children about which I am supposed to speak, I should answer that the greatest glory is that there are so many of them.

Eliminating the city child, whose problem is practically solved everywhere, we address ourselves to the rural child of the South. They constitute about 85 per cent of all the children and are concerned with the main industry of the South. They are the farmers' children. We live on what they raise in the fields, and as they prosper or decline, we improve or fail. Consequently, the thought of the South is turning strongly toward agricultural education in the country schools. We are now inducing the farmers' boys to stay on the farm and be good farmers instead of going to town to be poor lawyers and worse politicians. Therefore we note the great increase of agricultural colleges in the South. In Georgia one has been built in each Congressional district; Alabama has made noted progress in the same direction. The state colleges of agriculture are campaigning by pamphlets, field agents, reports, by demonstration work, exhibition trains, and farmers' institutes, until the country boy now begins to feel that he also must go to college, and that there is a college for him also.

In the schools of my county I am now sending to the state college of agriculture to get principals for the consolidated rural schools, instead of as heretofore to the state university, and I find that they are no longer insisting on Latin, Greek, and the history of the Egyptians, but turn their pupils to cotton, corn, and the history of the Texas boll weevil. If the agricultural college will hereafter provide principals for rural schools, it will go a long way toward solving the agricultural education of the rural child.

The organization of boys' corn clubs has been a great stimulant. Some

of the results have been remarkable. In Mississippi one thousand boys were organized into clubs and each planted his acre on his father's farm. The government furnishes the seed, the farmer furnishes the land and the tools and the boy, the merchants furnish the prizes, and Nature does the rest. One boy raised 120 bushels of corn on his acre, where the average yield had been 14 bushels. Another boy in South Carolina broke the world's record for boys by raising 228 bushels on his acre, which was more than many farmers around him did on ten acres. To say that there are fifty thousand boys in the South today interested in increasing the corn yield per acre and setting a new standard of cultivation is not to exceed the facts. It is an exceeding glory to the southern boy that he holds the record for corn, good old corn:

> Heap high the farmer's wintry hoard!
> Heap high the golden corn!
> No richer gift has Autumn poured
> From out her lavish horn!

In the rural districts the schools are being consolidated, and pupils are being hauled in wagons to the central schools of high grade. We have come to the just conclusion that a one-room schoolhouse is a failure, but that a three- or four-room house, graded, with a library, agricultural laboratory, experimental garden, kitchen, and sewing-room, with an up-to-date principal who knows his business and loves the country, is a success.

And so there is a readjusting of ideals of the pupils and practice of the teaching forces. We no longer are educating statesmen and candidates for president, but are educating farmers and their wives.

Now let me approach the subject about which there is much yet to be done, and that is the child of the mill. It seems that every section has some such problem. The sweat-shops of the East Side and Hester Street, the district messenger-service, the cash-boy service, the child in the mines of Pennsylvania, the child in the southern mill, all cry out to us for help. It seems that we cannot hide the innocents where the hungry hounds of modern commerce will not trail them. It seems that we cannot place them where the bloody fangs of the dividend-maker will not fasten upon their hearts and fatten upon their lives. The nation over, the children cry for protection against their parents and their would-be employers. Therefore the extension of child-labor laws prohibiting the employment of any child who is under twelve years of age is to be greatly urged. Such laws do now exist in many of the southern states, but since it is of no public interest whether they are enforced or not, and since it is of interest for parent and employer to disregard such laws, I greatly fear the benefit is more imaginary than real.

The cure is to be found in compulsory education, which not only saves a child from the curse of an employer, but also from the slavery of his own parents. It makes but little difference to a child whether he slaves for another, or for his own father. It makes a vast difference to him whether

he goes to school or not. And the sentiment for compulsory education is growing in the South. Kentucky and Arkansas have such laws. Virginia and North Carolina have such laws, but leave it to the local communities to put them into operation. One-third of Tennessee is operated under compulsory-attendance laws. Georgia and South Carolina are laboring with the passage of such laws. And if we could see plenty of money in sight to pay for compulsory education, we would sweep to it unanimously, carrying the negro and all.

I believe that, taking it all in all, the mill children are better off than they once were. Settlement workers, educational influences, and popular opinion have made better conditions for mill hands, young and old. There are many humane presidents and superintendents who provide comforts and pleasures for their hands and protect the helpless from the cruelty of those who would oppress them.

I would not be a true southern orator if I did not say something about the negro. We have heard a whole lot about the incubus, the black cloud, the race problem, etc., but I have to say this about the negro: Next to the blessed sunshine, the fertile fields, and the blue blood of the native whites, the greatest blessing the South has today is the presence of the negro. He is not a curse, he is not a menace, he is not a danger. What would become of our cotton fields, our rice swamps, our sugar plantations, our turpentine mills, our lumber industries, were it not for the strong, willing, tractable black hands of the negro? All waste and desert, gentlemen—at least for a while. Of the three problems, the foreigner in the North, the Chinaman in the West, and the negro in the South, commend me to the negro.

Now, ladies and gentlemen, let the negro alone. He will find himself in time, and no amount of worrying, prophesying, guessing, or abusing is going to hasten the Almighty's plans for the final racial adjustment of the negro. He is rapidly coming into his own social status, for he is finding a society of his own. He still lacks moral standards, but as for that, certain white people do also. He is getting his industrial education and getting it fast. He has long since found his industrial adjustment, and that is for labor, intelligent, skilled, independent labor, well paid and highly respected. Now let us get together and stop making educated loafers out of the negroes, but make educated laborers out of them.

And so, ladies and gentlemen, the glory of the children of today is the hope of the South for tomorrow. In thirty years we shall all be gone, and the school children of today will take our places, and the country shall then be as we are making it now. The future of the South waits on the education of its sons and daughters, and they are crying to us from field and mountainside to give them a chance.

IN MEMORIAM

A. WARREN EASTON

JAMES B. ASWELL, PRESIDENT, STATE NORMAL SCHOOL, NATCHITOCHES, LA.

During twenty-five years, Warren Easton was absent but once or twice from the annual meetings of this Department of Superintendence. His place is now vacant and his voice is silent forever.

It is, then, proper and beautiful that this great gathering of the school men of the nation should pause a moment in its considerations of the practical educational problems of the day, to do honor to the memory of one who did well his part in the rich constructive educational period of this vast region of our southern country. It was a time when the South was bringing to the republic its own contributions of youthful spirit, purposeful effort, courage, and confidence, which have resulted in a new era of educational endeavor and adequate adjustment.

Warren Easton, who passed out of this life on October 17, 1910, was an actor in this period of educational opportunity and achievement. He was born in 1848, in the city of New Orleans, was educated at the state university, was a successful teacher in the public schools, state superintendent of public education in Louisiana, leader in the establishment of the State Normal School, organizer of the Louisiana state institutes and summer schools, for twenty-two years the trusted and beloved superintendent of schools in the city of New Orleans, once president, and, for a quarter of a century, an honored member of this body.

He was a teacher in the turbulent days of the Reconstruction in the early 70's, and so well was his skill as a disciplinarian recognized that he was moved from school to school to straighten out difficult situations. He believed and demonstrated that a group of apparently incorrigible boys can be controlled, inspired, civilized, under the influence of music. He was the first to advocate publicly and introduce the teaching of singing and drawing in the public schools of his native city. Hundreds of prominent men in New Orleans today speak tenderly of Warren Easton because he led them and compelled them as boys to obey. I have yet to meet a former pupil of his who does not love him and who does not say, "I am Easton's friend because he helped me when I was a boy"—and after all, this is the test and the finest asset of a teacher's life.

As superintendent, beginning with little money and an uncertain public sentiment for public education, he advanced the New Orleans schools with amazing rapidity. He increased the public funds to more than a million dollars, doubled the efficiency of the schools at every point, and established them firmly in the confidence of all the people of his city.

Easton had a princely bearing—he was always immaculately dressed, courteous, cordial, jolly. He had faith in his people and in his work—he

believed he had the best schools in all the world. He knew his eight hundred teachers personally, could call them by name, and locate the school and grade of each. It was his good-fellowship, his diplomacy, and his buoyant hopefulness that made his co-workers love him. The children liked to meet him.

To be elected six times to the chief executive school position, and hold it for twenty-two years, in a great, growing, progressive city like New Orleans, is within itself not a matter of small consideration in estimating the life of an individual. It is an achievement worthy of a man.

Warren Easton gave forty years of active, continuous service to the public schools, and he was never ashamed to be called a teacher. He joined every movement to promote the cause to which he had early consecrated his life, and few men rejoiced more in the educational advancement of our people. His devotion to this Department of Superintendence, his keen interest in educational affairs generally, and his long rich experience gave him a progressive conservatism of great value to the school forces of the country, and reveal today characteristics that give his life a high place in this memorial service.

But the quality in Easton's life that will perpetuate his memory was his unusual ability to hold his friends. To be once a friend of Easton was to be always Easton's friend. His friends never deserted him. He was large-hearted and loyal—his friends knew him, trusted him, and depended upon him.

This, then, is the life we honor today, and it emphasizes the fact that in real achievement of permanent value a man may become a great leader in the nation's life as well by service to childhood as by subtlety in argument, shrewdness in business, or courage in war. It renews our hopes and gives us strength to be unafraid in consecrating ourselves anew to the sacred task of opening the way and directing the youth of this land to a wide and liberal future of service to country and to humanity.

B. WILLIAM WALLACE STETSON

PAYSON SMITH, STATE SUPERINTENDENT OF PUBLIC SCHOOLS, AUGUSTA, ME.

After a lingering illness of many months William Wallace Stetson died at his home in Auburn, Me., July 2, 1910. Mr. Stetson was born in Greene, Me., June 17, 1847, and spent his boyhood in the wholesome environment of a New England farming town, attending the district school near his father's farm and later Monmouth Academy and Edward Little Institute. He began his work as a teacher, as so many of our great educational leaders have done, in the district schools, teaching his first school at the age of fifteen. In 1868 he went to Illinois, where, after attend-

ing Monmouth College, he taught in district, high, and normal schools and began his experience as superintendent of schools. In 1884 Mr. Stetson returned to his native state where he was to render the notable educational service that was to win for him a far more than local reputation.

Upon returning to Maine he became principal of the Webster Grammar School of Auburn and later superintendent of schools of that city. He served as superintendent of schools of Auburn for ten years, during which his great executive ability, his broad grasp of school problems, and his intuitive skill in devising methods of teaching won increasing recognition, so that his promotion in 1895 to the chief educational office in his state came as a ready and natural consequence.

Mr. Stetson held the office of state superintendent of public schools of Maine for a period of twelve years, the longest term with one exception enjoyed by an incumbent of that office in the history of the state.

Several important educational reforms were instituted during his administration of this office. Among the more important may be named the abolition of the district system with the adoption of the present township system, a provision for the consolidation of schools and the conveyance of pupils, the adoption of the free-textbook system, the extension of free-tuition privileges in secondary schools to all pupils of the state, the state certification of teachers, and the adoption of a plan of union supervision which is designed to extend the advantages of expert direction to the schools of all towns.

The *Maine School Reports* prepared by Mr. Stetson were among the most widely circulated and most generally quoted educational documents of the decade during which they appeared. His terse, graphic style serves to command ready attention to the clearly developed conclusions of his educational philosophy. This style, appearing not only in his written reports, but dominating likewise his expression in speech, won for him a cordial welcome on the public platform, and his services as a lecturer on educational topics were constantly in demand. His skill as a speaker made him a powerful advocate of any cause in which he might enlist while his progressive ideals found him readily sympathetic toward any forward movement. As a result he gave generously of his time, strength, and abilities to the promotion of advanced educational plans both of his own and other states.

While Mr. Stetson held foremost his work for the public schools, he was likewise always to be found in the forefront of any movement affecting the welfare of the community in which he lived or of the state of which he was a citizen. Service was the keynote of his life and the opportunity to serve was the goal of his ambition.

Recognition of Mr. Stetson's broader educational activities is to be found in the record of his connection with such organizations as the New England Superintendents' Association, the American Institute of Instruc-

tion, and the National Education Association. He served as president of the first two and of the Department of Superintendence of the last.

Mr. Stetson received the degrees of A.M. and LL.D. from Colby College, Maine, and the degree of LL.D. from Monmouth College, Illinois.

In this brief outline of the life and activities of Mr. Stetson one touches only upon his larger public acts and services. To those whose privilege it was to know him there remain the tender memories of a large, whole-souled man who loved to open his heart to friends, who found his greatest joy in the opportunity to share another's burden or to lighten another's toilsome way, and looked always for those deeds and words of other men by which he might justify his own broad and generous faith in human kind. In his passing many men and women in many walks of life feel the loss which is beyond recompense—the loss of a frank, courageous, heart-lifting, sympathetic friend. At no time did Mr. Stetson show more clearly the beautiful characteristics that dominated his whole life than in the months when, wasted and weakened by disease, he awaited the last summons. The philosophy of service which had guided his public career and his private relationships endured to the end, and even in the last days no friend left his presence who did not feel that he had himself received the strength and the blessing of the interview.

It was in these last days that Mr. Stetson wrote a greeting to his friends —a greeting which was to be likewise his farewell. In this is the essence of his philosophy of life. In the "Joy of Serving," which is quoted in conclusion, he delineated an ideal which, tho high, he attained, and which he leaves, with the manifold words and deeds of a richly abundant life, to be at once the consolation and the continued inspiration of those who miss his kindly presence.

THE JOY OF SERVING

Souls grow lean if they think much of self or the recompense they should receive for exhibitions of concern for others. They are victims of a poverty no riches can relieve or conceal. They are barred from those sanctuaries where the heart sings the songs of peace. As the days loiter to their close they discover life is a sleepless torture. They refuse to learn it is not what you have that makes for happiness but the sacrifices made and forgotten that bring joys which abide. Life yields the largest dividends when you serve as spontaneously as you breathe and with as little aftermath of reflection. Then you will walk with those who travel in lonely paths, place a lifting hand beneath wearying burdens, give unregretted dollars to carry sunshine into shadowed lives, dispense home-brewed hospitalities, and nerve the elect with your hail and God-speed. Such service will tint the dawn when your lovers are legion, shed around you "the light that never was on sea or land," sing anthems in the chancel of your soul, and let you whisper, as the canvas of the Lord slips down the west,

"I hope to see my Pilot face to face
When I have crossed the bar."

TOPIC: THE PRESENT STATUS OF EDUCATION IN AMERICA

A. IN THE ELEMENTARY SCHOOLS

ELLA FLAGG YOUNG, SUPERINTENDENT OF SCHOOLS, CHICAGO, ILL.

[*Stenographic Report*]

The subject before us may be viewed from several different standpoints, at several different angles. Upon first thought, in considering the present status of elementary education, one would look to the statistical side, seeking for the advance in the number of those who are being educated in the elementary schools today, in comparison with the number ten years ago. The figures for 1910 are not ready, and when they are presented in the admirable report which our Commissioner of Education sends out to us, it will be much more satisfactory to study statistics from the printed page than to attempt to take them in rapidly thru the ear.

One might also consider this question from the financial side, and it would be interesting to note the increase in the amount of money poured out by the people of this country today for the education of the children in the elementary stage over that of ten years ago.

There is another side, however, which appeals to me more than the statistical side of the number attending or of the finances, and that is the side which deals with the change in the interpretation of the meaning of elementary education, as understood today and as understood ten years ago.

It is true that ten years ago leaders in the theory and principles of education in this country were forging ahead, discussing points which we workers in the field had scarcely touched upon; but with all their discussion, the ideas which they had grasped were not generally accepted in the elementary schools. There is nothing more wonderful in the history of this country than the remarkable strides made in the last decade by those who are in the field—superintendents, principals, and teachers—in their understanding of what is meant by elementary education.

It has long been customary to say that education deals with the physical, the mental, and the moral development; but let the men and women in this room think back ten years and compare the practice of physical education in the elementary schools then with that of physical education today, and they will say that it was merely a matter of lip service that we had so short a time ago, compared with what we are doing today on the physical side for the development of children.

It is true that thirty years ago in France they had reached the point where the school medical inspector, in Paris at least, visited the school each morning to inquire whether the children were in condition to be in school and at work during the day, deciding whether this child or that child might in some way infect with disease other children in the room.

But we had not reached that point ten years ago; and yet today all over this country, in the large cities and towns, special effort is made to get at the physical condition of the children and see that they neither injure each other nor are injured by the surroundings of the school. The school patrons who form a department in the National Education Association are making tremendous efforts toward carrying this idea of the physical well-being of the children into every school in the land, and they will succeed, because those women are in earnest.

Think of the exercises that we had for the children ten years ago that we called physical exercises, when the little things stood and put out their arms as if they were trying to draw them out of their sockets; then think of the games, the gymnastics for these children today, suited for their age, and suited for their stage of development.

There is a third phase on the physical side. We call it industrial or vocational training. We are still somewhat timorous about it, and yet we are beginning to realize that there are many boys and many girls in the schools who will not long continue to be interested in the purely academic or book work, whose whole being leans toward material construction—toward the doing of things with the hand; and there are many who thru economic conditions will be obliged to turn into industrial lines. In the elementary schools today we are studying to know what we can do to enable our schools to do their duty toward those children.

On the mental side there is a marked change. We certainly are much nearer to psychologic method than we were ten years ago. All method has not been advance, however. I know it is a dangerous thing, Mr. Chairman, to say here, but many of the subjects which we have introduced into the schools, manual training and household arts and science, are taught in most places as formally as arithmetic, spelling, reading, and writing are still taught. With the new studies there has not always come psychologic method. But if we chance into a school in which old methods obtain in full force, we realize that in advanced methods altho we have not learned to open always the way so that the minds of the children shall play naturally in approaching and exploring the subject, yet there is something of Horace Mann's idea that the minds of the early learners should play about the subject as the waters lap the shores of an island.

On the moral side we are working on perplexing problems. It is easier to advance physical education than mental; mental than moral. This whole question of instruction in morals has become most complicated for us with the great influx of peoples from all nations, with varying standards of morals and ethics. This whole question, as I say, has come upon us in such a way that it is most difficult for us to know just what to do. Here we have one side, indicated in an address made by Judge Lindsey a week ago, to the effect that it is not the child that has all the little school virtues who is always the good child. Then we have the other side, open-

ing up into that tremendous question, which does not originate in any weakness and which does not originate in any fault in the school, but which the school at last sees that it, for the sake of the nation, must take up and handle. I refer to the question of social hygiene but shall not be able to consider it in the time allotted to me. With that first question we are troubled, because it necessitates a change in ourselves. With the strong men and strong women who have taught in the elementary schools and who have laid the foundations for sterling manhood and womanhood in the boys and girls, it is true that to a large extent the measure of goodness of a child has lain in his conformity to the ideal that the teacher has as to what a boy or girl should be as his or her pupil. I remember the first shock I had with regard to that question after I had taught school four or five years. A boy who had been a model boy, who had always locked the wardrobe door and unlocked it, who had gathered up everything at night and seen to it that the room was in excellent condition, who knew all the bad boys and what they were doing, and told me that such a boy was not so good as he ought to be, had left school and been free out in the world. Alas! I soon learned, in hearing of his career, that he had simply the virtues, the methods, the customs that suited me in my school; that he had not been strengthened to go out and meet the temptations of life that appealed to him. It was then that I began to study the question as to whether virtues that are simply school virtues have lasting value. Do I mean that the children who are rebellious are the good children? No. But there is something which we must yet learn, an ideal which must be developed in our minds as to what is strength of character, and how strength of character is developed.

Two years ago I went to one of the large cities in this country, and was called upon by the newspaper reporters. It seemed as if they had got together before I arrived and planned to ask me one question. This was the question: How do you explain the fact that all the aldermen and congressmen that have gone astray are graduates of the public schools? Of course, I did not attempt to explain it. I told them that they must first show me the statistics upon which they based their question. We know that somehow we have not thus far succeeded in laying those foundations which make for a great nation, which make strong men and strong women. We are doing a great deal, but there is more for us to do.

Last October the Mayor of Chicago asked me to be one of the delegates from Chicago to the International Prison Congress. At first blush I thought it a little odd for me to go to a prison congress. On second thought I believed I should go there to find out how it happened that any of our boys and girls go to prison. What an experience I had in that congress! Those men and women in that congress were bent on studying, not how to punish, not how to reprove, but how to get nearer the good which lurked yet in this boy or that girl and to give it play. It was a wonderful lesson

With all our ardor for developing goodness, we have much to learn about that art. The superintendents in the elementary schools of America into which the streams are pouring from countless nations are far from an understanding of moral education as a means of strengthening and purifying the stream of civilization—we need another decade before the status of this work can be presented.

B. IN THE SECONDARY SCHOOLS

ELLIS U. GRAFF, PRINCIPAL OF HIGH SCHOOL, OMAHA, NEBR.

The public high school occupies a place of peculiar importance in our system of American education. Not only does it bridge the gap between the elementary school and the college, but it also bridges the gap between the elementary school and the active duties of life. The resulting multiplicity of demands gives rise to a conflict of aims difficult to reconcile. On the one hand, those who believe in practical training and the social serviceableness of the high school have felt that college preparation has had too large a part in the plans and purposes of the school; they have raised the cry of "college domination," which has been so often heard of late, and have pictured the college as a huge giant with a big stick labeled "entrance requirements" clubbing the high schools into submission. On the other hand, the colleges have felt that the schools have unduly broadened their courses under the pressure of local needs and included subjects which are not worthy of recognition for college entrance; that the interest of the school is not primarily in thoro and accurate scholarship, and that a great deal of superficial and inferior work is being offered as preparation for college.

Both of these views contain some truth, but the solution of the difficulty lies in a compromise between them. The high school needs the steadying influence of the higher institution with its scholastic ideals; the college needs the socializing effect which comes from relationship with an institution in contact with the people. Recent signs indicate that this problem is being considered in a spirit of co-operation and that a better understanding is being arrived at. The high school with all its demands for autonomy is preparing more pupils for college than ever before. The college is showing an increased liberality in regard to entrance requirements and entrance examinations. A significant example of this tendency is the recent proposal of the Harvard faculty to admit pupils on certificate and an examination in four subjects, instead of an examination in all subjects, as heretofore. This indicates an increasing willingness to accept the work of the schools.

In the midst of this stress and strain of conflicting demands, what has been the effect upon the development of the secondary school? The most significant fact in the current history of secondary education has been the remarkable growth and progress in all its departments, especially during

the past two decades. The last report of the United States Commissioner of Education (1909) shows that the total number of secondary students of high-school grade for the year ending June, 1909, was 1,034,827. This is the first time the number has reached the million mark. The number in public schools was 841,273. This represents an increase, in twenty years, from 202,963, or over 400 per cent. Not only is the number larger than ever before, but the rate of increase from year to year is greater than the rate of increase in population.

An additional evidence of growth is found in the increase in the number of schools from 2,526 in 1889 to 9,317 in 1909; and in the number of teachers from 9,120 to 37,491.

These figures are significant. They indicate a remarkable growth, and show that in spite of criticisms which are often made and difficulties which are admitted to exist, the high school, as a whole, is fulfilling an indispensable function in our national life.

In addition to these figures, growth is further shown by the increased expenditures for buildings and equipment. While no exact figures are available for this item, yet it is apparent that many fine buildings are being erected in various parts of the country and the equipment is being elaborated to a point of greater efficiency. It is true that in some cases money is spent for outer ornamentation and other features of mere show rather than in the direction of fireproof construction, good light, fresh air, well-distributed heat, freedom from dust, etc.; but as a whole the movement for better material equipment has been in a forward direction.

Yet the condition of an institution cannot be measured by numbers alone nor in terms of material welfare. Dr. John H. Holmes has well said, "The real test of the vitality of an institution is not that of number but of the influence which it exerts upon the controlling forces of human life." What can be said of the influences of the high school? There are many signs of unrest even in the midst of the present growth and prosperity. A careful study of our school population shows that a large part of our youth after the age of fourteen is out of school. A study of this subject by Mr. Arthur J. Jones[1] presents figures to the effect that the probable maximum enrollment by age in all educational institutions of our country is as follows: 14 years, 83.87 per cent; 15 years, 57.65 per cent; 16 years, 39.64 per cent; 17 years, 23.84 per cent; 18 years, 14.74 per cent; 19 years, 9.99 per cent; 20 years, 6.93 per cent. If these figures are even approximately correct, it indicates that over half of the young people between fifteen and twenty years of age are not in any educational institution. The dissatisfaction which results from a contemplation of these figures does not arise so much from the feeling that the school is responsible for the dropping-out, nor that it should make greater efforts to retain its pupils, since much of the dropping-out is necessary; it is rather caused by a feeling that the school should do

[1] *Bulletin No. 1*, 1907, U.S. Department of Education.

more for these pupils before they drop out; that too much that is given them is given because it will benefit them in their higher grades if they continue in school. In other words, the feeling is that the school is conducted too much on the plan of the tontine insurance policy—the rewards are all yours if you are fortunate enough to be able to persist thru the tontine period; if not, you obtain little, if anything. There is a reasonable basis for this feeling. Of course no plan can ever be contrived which will give to a pupil who discontinues his school work as much benefit as he would have obtained had he remained in school; but it is not asking too much that the work should be presented from the standpoint of its use and its bearing on vocation as well as from the standpoint of its being preparation for further education.

Correlative with this unrest over the large number dropping out is a feeling of concern on the part of teachers at the apparent lack of interest in scholastic work on the part of those in school. In a high-school teachers' meeting which the writer attended this year a paper was read by a high-school teacher who deplored the current lack of interest in scholarly pursuits on the part of the pupils and the impossibility of securing the same interest in Latin, algebra, and English as is bestowed upon athletics, social activities, and amusements. This is a fact which is apparent to all thoughtful students of modern educational conditions. The recent utterances of two prominent university presidents furnish a striking illustration of this fact. The first quotation is from an article by President Hadley of Yale in the *New York Times* for August 28, 1909. He says:

> The growing complexity of the American social organization, the increase of wealth and the comforts and luxuries which wealth brings with it, the development of games and sports of every kind, and the great stress which all branches of society lay upon proficiency in those sports create a set of very distracting conditions in college as well as out of it. They lead the student who has no special intellectual interest, but comes to college for the sake of general culture, to seek that general culture on lines of least resistance. But if our definition of culture is correct, we can hardly expect to obtain it in this way. The student who looks only at the immediate interests of the moment is becoming uncultured rather than cultured—is being trained to narrow angles of vision instead of wide ones.

Of similar import is an address on "The Spirit of Learning" delivered in June, 1909, by President Wilson of Princeton. He says:

> The field is clear for all these little activities, as it is clear for athletics. Athletics has no serious competitor except these amusements and petty engrossments; they have no serious competitor except athletics. The scholar is not in the game.

These analyses of the situation may be said to apply with equal force to high-school conditions, with this difference, that in college the social and other outside activities are an intrinsic part of the college world, while in the high schools, since the pupils live in their own homes, they are to a

greater extent a part of the social life of the entire community. These views are not expressed in a spirit of criticism, but they imply a criticism of educational institutions in that they have not somehow made scholarship as attractive as amusements.

Thus far our survey of the status of secondary education has shown two apparently contradicatory sets of facts: first, a remarkable growth and progress; and second, an undercurrent of feeling that the needs of today are not being met by suitable kinds of training. What causes or forces underlie these facts which will harmonize them and show them to be but two phases of a single problem?

The sociological basis of education is well understood by the teachers of today; it has been thoroly discussed in the educational literature of the past decade. They accept as self-evident truths such statements as this of Ruskin:

> No teacher can truly promote the cause of education, until he knows the mode of life for which that education is to prepare his pupil;[1]

or this, from Dr. Paul H. Hanus:

> Together with this improved adaption of the school to the needs of each individual there is also a growing recognition of the important social function which the school has to fulfill . . . . the primary social function of all education, and in particular of secondary education, is to adapt every individual to the civilization of his time.[2]

Yet the assumption of this task by the school is the largest single work undertaken by any institution in American life today, and the carrying-out of the task involves Herculean labor. So complex and so shifting are the conditions of modern life, that to attempt to prepare for them is like trying to paint a picture with pigments which change their color as they flow from the brush. By the time the product of the school is ready for life, the conditions demand something different.

Compare for a moment the present decade with that of a generation ago. The first characteristic which strikes the observer is the increase of wealth and of luxuries. This is the age of electricity, of automobiles, of airships, of machinery. It is easier to do the work of the world than ever before. Man's victory over the forces of nature is so nearly complete that he is no longer obliged to struggle directly to secure food, warmth, shelter, and clothing. Thru machinery all is changed. The same kind of effort is not required as formerly. The emphasis today is on ingenuity and quickness rather than upon mere effort or industry.

The second characteristic is that this is an age of organization. An individual no longer struggles by himself but, as Dr. George E. Vincent puts it, "He does team work." Individual power and ability count for less

[1] *Crown of Wild Olive*, essay on "Work."

[2] *Educational Aims and Educational Values*, p. 79.

relatively. The emphasis is placed upon the relationships which the individual sustains to other members in the complicated machinery of life.

This has produced a certain impersonal attitude in society. Things are done by large organizations of men which cannot be done by individuals. Also, many misdeeds are committed from which an individual would shrink but which an impersonal organization would perform without compunction.

Organization and system have taken charge of the productive industries of our day. They are no longer carried on in the homes as formerly. This removal of productive industry from the home has taken away from the youth a valuable form of training which has not been replaced. It has left many of them without occupation for their leisure hours. It has allowed them to mature without development of self-reliance, and has made it difficult for them to be of service in the home life. This has resulted in a certain immaturity in the youth which is evident in their school life. They are not so teachable as formerly because they are not so mature and not so self-reliant.

Emerson has truly said:

> No man can learn what he has not preparation for learning. . . . . God screens us evermore from premature ideas. Our eyes are holden that we cannot see things that stare us in the face, until the hour arrives when the mind is ripened—then we behold them, and the time when we saw them not is like a dream.

These changes have a direct and vital bearing upon education. Instead of providing intellectual training as a supplement to the skill and development obtained from labor in the productive industries of the home, the school is now face to face with the problem of supplying the foundation of personal development upon which to build the superstructure of intellectual attainment. The pupil must not only be taught, he must be trained; and he must not only be trained, he must be trained to some definite purpose. This implies that the school shall minister not only to cultural aims but to vocational aims as well.

How this work shall be undertaken is the present pressing problem. Some think, with ex-President Eliot, that a system of trade schools will be built up; others, that technical high schools will fill the need. Meanwhile, numerous supplementary schools are being established, Y.M.C.A. schools, correspondence schools, schools conducted by employers like that of John Wanamaker of Philadelphia and of Sears Roebuck Co. of Chicago. These efforts are undoubtedly indicative of the need which exists, and they point to a possible solution of the question; tho it is doubtful whether any but public measures can ultimately minister to so general a demand.

Of one thing we may be certain: whatever type of public secondary education may develop, the aim of general culture will not be supplanted nor superseded. It seems most probable that the present type of education will be supplemented with the necessary elements of training for twentieth-century civilization.

The whole situation is well summarized by Commissioner Brown in his last report.[1] He says:

> The dangers of the situation as regards the high schools are no less acute. These schools are affected by forces pulling upon them, not only from the colleges above and the grammar schools below, but from the varied life of the community which they serve. The new demands, which may be roughly grouped under industrial and commercial education, must give them anxious thought. There are those who fear that the high school as an institutional type may fall into disfavor unless it can readily adapt itself to the new needs of the time, as the Latin grammar school of colonial days declined before the rising academies, and less than a century later the academy declined before the new popularity of the high schools. Either a modified and broadened high school or a school of different type altogether may fairly be expected to dispute the pre-eminence of the high school as it is today. But the high school is still on a rising tide, and its possibilities of readjustment to new needs are very great.

In conclusion, it may be said that the present status of secondary education is one of great prosperity; the future, of wonderful opportunity. To fulfill this opportunity the high school must continually readjust itself to the needs of a changing society. It must thoroly analyze and understand the conditions of modern life, its needs and its demands, and it must supply the training which will fit the youth of its day and age to meet these conditions.

C. IN THE COLLEGES AND UNIVERSITIES

GUY POTTER BENTON, PRESIDENT OF MIAMI UNIVERSITY, OXFORD, OHIO

If status means a standing which is in any sense permanent, then there is no status of higher education in the United States. That there may seem to be no wandering from the subject, let us assume, then, at the outset, that those responsible for this program have commissioned us to discuss the present condition of higher education as represented by institutional standards and by the opinions and policies of educational leaders.

In the beginning we may as well make full confession of the truth and admit that there are no universal standards or fixed policies for higher education in the United States. Before we can hope to have a permanent status which will command for our institutions of higher learning the respect of the world of scholarship everywhere there must necessarily be certain agreed definitions of terms. The whole system of education in our country, from kindergarten to university, is subject to indictment for capriciousness.

The American inclination to novelty is nowhere more manifest than in the teaching profession. It is time that those of us who are charged with the high responsibility of training childhood and youth should awaken to a solemn realization of the danger which lurks in ill-considered experimentation. The attempted practice of half-digested theories and the superficial imitation of the spectacular work of educational visionaries

[1] *Report of U.S. Commissioner of Education*, 1910, Vol. I, p. 19.

are menacing the coming manhood and womanhood of America. The average teacher or educational leader is in such fear of being held answerable to the charge of antiquity that, in utter disregard for the rights of the taught, he makes mad rush to get into the limelight with the rest of the educational crowd. Some prominent school superintendent pipes and those of lesser importance all dance. Some distinguished college or university president theorizes and presidents of smaller stature run to practice. Some great specialist poses as a critic of the existing order of things and the average college professor feels that, to be in the fashion, he must become iconoclastic.

The greatest university president in America proclaims the need of a larger freedom of electives with three years as sufficient for the baccalaureate degree and the rest of us submit tamely to his leading. A pyrotechnic professor of English in one of our largest universities denounces all the hymns of the church as doggerel, and the collegiate critics of hymnology have multiplied amazingly. Twenty years ago the National Education Association was almost wholly psychological in its convention program. "Apperception" was the chief subject of discussion and "a pot of green feathers" was always in evidence. Pedagogical tyros presumed to discuss great psychological questions with all the assurance of studied specialists, and the storerooms of educational book companies were flooded with works on psychology which could never hope to meet approval in the councils of thoro scholarship. The convention program of the National Education Association in our own day is largely agricultural, industrial, and vocational. We have passed from the realm of the spiritual to the realm of the material, and who is so bold as to prophesy what the subject of discussion in these meetings will be ten years hence?

In elementary and secondary schools, courses of study are constantly taking to themselves more subjects and the college curricula are becoming more crowded with every added year. But the denunciation of all advanced educational thinkers as "faddists" is an easy way of escape for those who are opposed to progress. It is the subterfuge of the indolent. The educational "stand-patter" is a worse sinner than the educational "insurgent." The reactionary is, after all, the chief culprit among the many educational offenders. If compelled to make choice between two evils there is no question but that, with the end in view of the largest and best service to young life, we should choose progressive agitation rather than ultra-conservatism. Out of this seething caldron of new ideas there may remain a residuum of refined educational principles. Out of this ferment of discontent may arise an educational policy universally accepted as worthy of permanency and one which will bring contentment to all who are interested in education. Then intensive work will be possible, and, by our constant growth and healthful development, we shall make the American educational system increasingly effective. The destructive critic never accomplishes anything which

is worth while. In spite of all the just criticisms which have been lodged against educational work in America, the thoughtful and fair-minded person must admit that there has been a distinct advance made with every added year of our history and that our record on the whole is one of progress. The difficulty with us all lies in the fact that no generally accepted definition of the real purpose of education has yet been found.

The earnest prayer of every progressive teacher of our own times should be for poise, for balance, and for real sanity. When that prayer is answered the attitude of the true teacher toward every proposed reform or suggested advance in methods of education will be that of the scientist working in his laboratory. The scholarly investigator never accepts the half-tried theories of others as final. The research scholar submits his *own* original theories to the same tests he requires of those originating with others and announces nothing as true until, step by step, he has established himself in absolute and final conclusions. The upturned, expectant faces of the rising generation constitute a silent, pathetic, and impressive appeal to those who teach them to advance with the assurance of worked-out certainty, to be progressive without fanatical superficiality.

Since this particular time is set apart for attention to the status of higher education in America we may dismiss, for the moment, all considerations of the weaknesses or excellences of elementary and secondary schools and devote ourselves to a critical study of present conditions and policies in our colleges, and in the graduate and professional schools of our universities.

The American college is a transplanted institution. It can lay small claim to originality. As we have it in our country today the college is an educational hybrid. It found its beginnings in an attempted imitation of the aristocratic college of culture as grown in the English university system. Upon the original root have been grafted two very different shoots—one a sickly German university sprout and the other a somewhat healthful sprig of American originality. The situation which confronts us, however, is by no means hopeless. There is strong ground for belief that out of this rooting and grafting there will soon come a vigorous tree, under whose umbrageous protection all educational leaders and followers will be pleased to find shelter.

There are about four hundred and fifty so-called colleges or universities in the United States. All stand committed in various ways by different requirements to the English conception of the humanities as a necessary basis for the baccalaureate degree. There is a smattering of the German university system in all, with evidences everywhere of a liberal adoption of the half-tested theories of one or more American educational theorists. The result of it all is an American college and university system which is a composite of requirements, electives, and groups, with conceptions of methods of instruction and standards of educational measurements as numerous as the colleges and universities themselves.

It is not alone in the undergraduate colleges where the goal is the Bachelor's degree that these different views and varying policies are found. In the graduate colleges and professional schools there is similar dispute as to methods and there are differing notions of aims and purposes. Take one concrete example, for instance. In the Law School of Harvard University the baccalaureate degree is required for admission and the case system is used exclusively as the method of instruction. In other reputable law schools a high-school certificate will suffice for admission, and the textbook method is exploited as the only proper system of teaching. Then there are those who try to strike a balance between the two. The distinguished dean of the Law School of Yale University recently made manifest his desire for safe passage between "Scylla and Charybdis" by advocating a combination of the case and the textbook system of instruction. Multiplied examples might be given in proof of the proposition that higher education in America is not built on many foundation stones of common agreement. Nevertheless, the institutions of higher learning in America have been mighty forces in the development of our civilization and, with all their differences and uncertainties, they could not be dispensed with without untold loss. In spite of divergent policies their present value is simply inestimable.

The paramount reason for the lack of the largest efficiency of our colleges is found in the fact that the attitude of college and university men is too largely one of independence and of separation from the elementary and secondary schools. Apparently they do not recognize that the largest educational efficiency can be realized only thru an educational system which is a unified whole. The institutions of higher learning must be closely related to the public schools and must be linked up in sympathetic co-operation with those who are responsible for the effectiveness of the elementary and secondary schools if higher education is to mean all it may mean by way of everything that is best in our American life.

The value of college and university training, if it have a value, must make itself manifest thru the college professor or instructor. It is a safe statement that the most serious obstructionists in the way of real educational progress today are the ultra-conservative college professors in many of our institutions of higher learning. The sense of security felt by too many occupants of college chairs has a tendency to make them comfortable in laziness. Running in a groove requires so little exertion that those once started are loath to get out of it. The complacent satisfaction of too many college workers is a curse rather than a blessing to education. It will be admitted that every great specialist should be primarily concerned with his own line of specialization, but he cannot accomplish the utmost possible in his chosen field unless he understands the relation of his particular department to that of all other departments. He will fail of the largest accomplishment where he works if he is without sympathetic knowledge of the relation his work

bears to education in general. The proper attitude of the college worker toward this general educational problem should be that of the scholarly investigator, of the truth seeker. His chief effort should ever be to correlate. The difficulty now is that we are narrow; we are running in circles; we are jealous of our own departments. Let us make shamefaced confession that it is because of this narrowness that the colleges are not filling the largest possible place in the American school system and are not participating as it is their privilege to do in solving the problems of progressive education.

The educational system does not consist of disjointed and competitive parts. "We being many are one body" in education, "and every one members one of another."

It is a tremendous mistake to regard the college as isolated and independent. The inexcusable arrogance of the college professor in affirming the independence of the college and its right to dictate to the secondary schools has a tendency to thwart the fullest effectiveness of our entire educational system. My plea is for greater sympathy between educational workers in all departments of a great system, not broken but united. There is no sadder spectacle than that of bargain-counter competition between departments in what should be one great educational corporation. The only rivalry should be such as exists in a great general store where each particular department strives to surpass the others in the efficiency of service rendered to the employer who heads the entire concern.

Co-operation is essential among the various and several departments of our educational system. We can never have this co-operation so long as those responsible for the secondary schools, animated by jealousy, or goaded by self-induced feelings of inferiority, assume the scornful or flippant air of defiance toward those who teach in the colleges. Once more, we shall never have this co-operation so long as college professors are snobbish and take refuge in a self-opinionated and false sense of their superiority. There is often little ground for this superior claim of college professors. Too many of them have no pedagogical point of view. It is not disputed, I think, that information is the first necessary possession of him who would teach a given subject, but knowledge alone is not sufficient. It has been well said by another that "a college professor may be a great man and an honored member of many societies and still be, as a teacher, woefully incompetent." I have often wished that I might take some college professors on a pilgrimage to the room of some good primary teacher in order that those who pride themselves on belonging to a higher grade of educational workers might learn how to teach to the best advantage. If elementary and secondary teachers will adapt, as fully as is possible, to a young class of pupils the scientific and laboratory methods of the college, and if college professors can catch somewhat of the enthusiasm of the elementary and secondary teachers, added to the pedagogical knowledge which makes the public-school teacher now

more generally successful as an instructor than the college professor, we shall have the very best teaching in all departments of one great educational system.

Qualifying adjectives are unnecessary in describing teachers. A teacher is a teacher whether working in the kindergarten, the grades, the high school, the college, or the university. No higher honor belongs to one than to another. Each is important in his place and should regard his position one of the greatest possible honor, provided only that he does the work committed to his hands in the best way possible for the growth and development of those committed to his teaching. The dawning of the perfect day will bring a unified educational system, knowing no distinctions as to rank, but binding together, in sympathetic co-operation, all those who teach,

with all lowliness and meekness, with long suffering; forbearing one another in love; endeavoring to keep the unity of the spirit in the bond of peace.

The foregoing conclusion is in no sense a digression. It grows directly out of the subject assigned me. The status of higher education in the United States is not what it might be because of the fact that the institutions of higher learning have not properly related themselves to the educational system as a whole. They can never be all that they may be in efficiency while they exist in isolation and in the fancied security of their own superiority and independence.

The hope of a unified educational system in our country lies in the state universities of America. We have no national universities. That statement is made without any desire to harrow the pride of the few who boastfully claim that their institutions *are* national in character. It will readily be admitted that there are some American institutions which are more widely known than others. It is equally true, however, that the state university, which is chiefly a product of the great Central West, happily belongs in a peculiar way to the public-school system. State universities are receiving larger support every year and as those responsible for their management come more and more to realize the close relationship that should exist between these institutions and the high schools and elementary schools below we shall approximate, as fully as may be, in the United States, the ideal educational system of the world.

Education is becoming increasingly democratic. A recent editorial in the *Saturday Evening Post* declares:

The older endowed colleges, of course, originally were, and still pretty largely are, aristocratic institutions. They were meant for gentlemen. They contemplate that their graduates should be ornaments to society. The public schools grew up in conformity with the entrance requirements of the colleges—although it was obvious that a great portion of the public-school pupils would have no time to ornament anything except possibly their own picket fences with a coat of paint. The state universities may stand—and rather increasingly do stand—in a different relation to the public schools. They may stand for a system built from the bottom up rather than from the top down.

The state universities in the various states of the Union, by collaboration with state superintendents of public instruction, city superintendents, high-school principals, and county superintendents, may so weld university and college in with the high school and the grades as to give us an educational system which will produce in our country the largest social efficiency. The great public-school system of America unified, then, in completest possible form from kindergarten to university, evolving policies which will give to our elementary and secondary schools a status challenging the confidence of the American people, will also establish standards of higher education that all endowed institutions, whether supported by some branch of the church or by private benefaction, will be obliged to follow.

If there be any such thing as a status of higher education in the United States at this time it is on the few points of agreement to which all reputable colleges and universities now subscribe. In higher education we are at present, we may safely say, agreed on three things: first, that a completed secondary-school training shall be required for admission to college; second, that preparatory work shall be followed by further study in a college course of cultural and disciplinary studies; and third, that graduate colleges and professional schools shall be maintained for advanced study and higher degrees. This is really all there is to the status of higher education in the United States at this moment. In nothing else is there an approach to unanimity of opinion. In making this statement, I, of course, speak only of standards of scholarship. In matters of conduct, standards of character, and ideals of public service, the institutions of higher learning in our country are more nearly in agreement. It is the generally accepted conviction, I believe, among college authorities that higher education is a failure unless it shall be able to boast as its best product a potent social force.

So far as matters of scholarship are concerned, while we are generally agreed that there must be a completed secondary-school training with advanced study thereafter in a college course of cultural and disciplinary studies, all to be succeeded by graduate and professional training, we are in disagreement about nearly everything else. We have constant controversy as to the purpose of a college course for instance, and at the present time there is little prospect of a satisfactory solution of this problem. The discussions as to whether the college curriculum should be predominantly utilitarian or cultural and disciplinary in character is more lively today than ever. It promises to wax warmer until, by co-operation of the leaders in all branches of a unified public-school system in America, we shall be able, thru careful investigation and by painstaking, cold-blooded weighing of results, to reach conclusions which must be accepted by all as final.

In considering the status of higher education in the United States we are also obliged to admit that there is wide difference of opinion as to the proper length of the college course between the high school and the professional and graduate college of the university. In all frankness we are

bound to say that there is no immediate likelihood of agreement with President Baker, the distinguished head of the University of Colorado, in the position taken by him at the recent meeting of the National Association of State Universities when he said:

> The thing to do with the liberal arts college is to abolish it, frankly and quickly, in its present form. If there was ever an absurdity in the history of civilization, it is the present status and use of the college of liberal arts in this country. And you gave the whole system away when you inaugurated the double degree scheme.

Neither is there large and enthusiastic agreement with President Baker as he further declares:

> It is time for us to say frankly that preparatory education should end at about twenty years of age and there begin our university work; and then we should have none of these discussions.

Another subject of difference among the leaders of higher education in this country is that which has to do with the character of college curricula. To what extent the vocational and scientific studies may properly be regarded as disciplinary and cultural, and how far the pure mathematics, linguistics, and the humanities may be regarded as practical are questions to which the most earnest and thoughtful of our educational leaders have been unable to find a common answer.

Having in this somewhat desultory fashion set forth the points of agreement and disagreement in the scheme of higher education in the United States and having been driven to the conclusion that there is no present educational status in our colleges and universities that can properly be called such, I believe I have fully met the obligation placed upon me by this subject.

May I not, however, in conclusion, venture to prophesy that a larger ground of common agreement will soon be found? The National Education Association has appointed a committee of five to deal with the whole subject of the reorganization of American education, and at the recent annual meeting of the National Association of State Universities in Washington there was appointed a standing committee on "Reorganization of Education," consisting of Presidents Bryan of Indiana University, Schurman of Cornell University, Hill of the University of Missouri, Strong of the University of Kansas, and McVey of the University of North Dakota. It is not too much to hope that these two committees in co-operation, representing unitedly the great cause of public education in our country, will reach conclusions which will give to higher education in the United States a real status commanding the respect of the world. Personally, I dare to hope that these committees will conclude that the four-years' college course should be retained between the high school and the university, thereby prolonging the infantile period and guaranteeing a later increased social efficiency.

THE STANDARDS OF PROFESSIONAL LIFE AS APPLIED TO TEACHING

HENRY SUZZALLO, PROFESSOR OF THE PHILOSOPHY OF EDUCATION, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK, N.Y.

[*Stenographic Report*]

We are in the habit of calling some types of work professional, implying that others are not. At the same time our phraseology carries the implication that one is more respectable than the other. Of course if there are inevitable stratifications in jobs as there are in men it is necessary to recognize the fact and act accordingly. The purpose of this discussion is to raise and answer the following questions: What are the valid distinctions between professional and non-professional employment? What constitutes the practice of a profession? More particularly what does or will make teaching a truly professional service?

There are the four traditional professions—law, theology, medicine, and teaching. There are, too, some occupations that verge on the professional circle, or are recent recruits. Such are engineering, journalism, nursing, settlement work, and the like. On the other hand, we do not ordinarily include unskilled labor, the mechanic, and the business man among our professional servants. At once we feel the tendency to give greater praise or blame to professional men and women, as tho their work is more difficult or more important.

The reason for this suggested superiority or importance of professional service lies in the fact that there is greater power for general human weal or woe united with professional service than with business or unskilled and even skilled labor. A man who plants a field well gets a larger crop. The man who does it ill spoils a field of clods and some grain. But a good lawyer earns not only his daily bread, but at the same time protects something precious—as property, life, liberty, or happiness. The bad lawyer, the unprofessional one, quibbling over technicalities and bullyragging witnesses, juries, and judges, earns his daily bread, to be sure, but he has violated the spirit of ancient laws, destroyed reverence for courts and justice, and walked rough-shod over the sanctities and rights of men. He has earned his bread, but he has incidentally destroyed institutions.

In a rough way society tries to protect itself against the abuse of these large powers which are incident to the earnings of a livelihood in professional service. It demands more general culture preliminary to the study and practice of a profession. This merely means it requires that the professional practitioner, because of his peculiar powers and temptations, must be given a fundamental knowledge of those values, ideals, traditions, which are fundamental to our social life. Hence the boy may go to a trade or a business at the close of the elementary school, but the youth may not start his work as a teacher, lawyer, doctor, or nurse before he has passed thru the high school. The secondary school means a broader and more

intensive view of life in general than the elementary school. The professional work is not merely more scientific and complex than non-professional service—it has intimate connections with the fundamental values of life. It ramifies into the greater movements of our civilization. Hence the need for a wider, more intensive general education, which will foster a knowledge of, and a reverence for, human rights and institutions.

If the practice of professional life must rest upon a foundation of broad general culture, what then are the special internal qualities which mark it off from other forms of service? We would suggest four characteristics of professional life:

First, It is a ministry to crises.
Second, It is an expert service.
Third, It is a social servantship.
Fourth, It is an ethical co-operation.

It is with particular reference to showing how public-school teaching realizes and fails to meet these standards that we are entered upon this discussion. Our purpose is never merely to find fault, but to get at the frank truth of the matter and to suggest helpful lines of advance.

A man who spends his life in the ever-repeating and monotonous business of working the lever of a machine in a shoe factory has little opportunity to meet new problems. It is not normal for him to be facing and solving new situations, mental crises that require resource and thought. The very nature of his situation makes it impossible for him to become what every professional workman is—a master of crises.

No such limiting situation exists in teaching. The teacher is master of the school, unless he makes of it a machine which masters him. Every child is in degree different from every other, and so is every class, and every day with the same class. Always there is some new ignorance, doubt, hope, or discouragement to cope with. Here the resource and the tact of the teacher are called for fully. He must know and identify the situation, organize his resources, so as to bring it to bear definitely upon the novel problem before him.

As a lawyer is called in to redeem a client from a situation which jeopardizes property, liberty, life, or happiness, as a doctor protects life and health, as a minister faces down the danger of spiritual sin, so the teacher protects the divine potentialities of childhood, conquers the deathlike touch of error and discouragement, fosters intellectual courage and the passion for goodness. The teacher is in short a minister to the intellectual and moral and spiritual crises of childhood.

At least it should be so, if teaching is rightly practiced. If our teaching becomes a monotonous drill and grind, that the child feels to be of little moment to him, then teaching is not a professional service. Schools cannot become "lock-steps" and "machines" and at the same time render professional service.

The crucial nature of all teaching of the young is frequently missed because we are dealing with children and not with adults. The difficulties of children are in most cases solved for the adult, and hence the adult misses their significance. Because childhood's troubles are solved situations to the adult it does not follow that they are not important to the child. Children's troubles are very real to them. Thru their solution comes growth in thought and action. To deny a child's curiosity as it pokes around in the world may be to commit him to slow intellectual starvation. To hush up his play and his garrulousness is to cripple his ultimate power to act, express, and control himself.

It is also true that a child's troubles come close together, as they do not in an adult's world. He is a baby ushered into a great confusing universe. Nothing is old to him; everything is new. The very commonness of new problems in his life hides their crucial nature from us, who look for a new problem to appear only now and then. Only as we approach childhood with the traits of full sympathy and versatile imagination can we serve little children, ministering to their difficulties so that their potentialities have a fair chance to reach a full stature.

As teachers we are set aside to perform a specialized duty. We should not have schools if homes could do the work as well. Teachers must have more power about their business than ordinary laymen. Otherwise we are not expert in our workmanship. The authority with which we speak should be based not upon more years of service, tho that ought to go far, but upon superior scholarship, a fuller command of mental processes, and an excelling personality for stimulating thought and checking action. In a world full of intelligent people, we shall have to stir ourselves to keep ahead in a work which has so much to do with life in general, a field in which all men play some part. To be expert necessitates (1) a superior command over the wisdom of life and (2) a superior power in bringing it to bear upon human subjects. Each of these elements in teaching efficiency has a double mode of operation. Our worldly wisdom may be simply an intellectual possession or it may be firmly organized in the web and woof of our personalities. As our truths and values are possessed in one or the other of these ways, it has to be brought to bear upon childhood in one of two general ways: thru conscious and technical methods of instruction and thru the subtle and more or less unself-conscious reactions of the teacher's personality. Expertness in teaching, therefore, consists in four typical superiorities: (*a*) in a scholarly command of subject-matter; (*b*) in a better organization of character; (*c*) in a larger and more versatile command of conscious modes of transmitting facts and ideals; and (*d*) in a more potent and winsome, forceful, and sympathetic manner of personal contact with other human beings.

We must work always with regard to the social effects of our teaching. We are not teaching just arithmetic, reading, writing, and the rest; we

are making men, the pillars of social institutions. The final significance of all our teaching is social. Our danger as teachers is not that we shall become unprofessional, but that we shall remain non-professional. Like the minister, we have entered on our mission with the vow of poverty on our lips. A salary system inadequate in its provisions restricts our temptation to get rich. The fee system of the doctor and the lawyer is a temptation we do not have. We are not likely to neglect the plain social duty that we behold to be ours; we are simply likely not to behold it at all. Our monastic vision, along with that of ministers, may make us scorn the world a bit, when it is in that same world our product must be tested. To be social and not bookish, practical and not pedantic, is our professional salvation. We cannot with safety ever let teaching be solely a means of livelihood. The spirit of social service must dominate us, and we must trust that the world will somehow let us live in decency, for teaching is not primarily a business, a way of gaining worldly goods, however necessary these may be; it is primarily a profession of faith in large ideals and the willingness to enlarge their operation in the world.

A more vital danger than the temptation to look upon teaching as mere means of livelihood is the danger that we may shut ourselves out from the world we are alleged to serve. Pedagogical aloofness and academic cocksureness are only modern forms of monastic isolation that check the fullness of our social servantship. School-teachers need social contact and social information; they need to derive their inspiration and their standards of efficiency not so much from their own vocational ancestors as from the struggles and aspirations of the very real world that throngs around the school. Only thru such intimacies with real life can teaching become a true and real social servantship.

And last I would call your attention to the liberal way in which education should be conducted. As a creative work, teaching builds with precious human stuff. In building institutions and civilizations with men a new principle enters that does not play a part in erecting buildings of stone, mortar, and other things. Children are our equals, they are like us in sensibility, they are blood of our blood. We should not, indeed, we cannot, successfully educate our fellow-humans unless the co-operation is considerate and complete. We have the right to manage and manipulate our children only under the guidance of well-established ethical principles. We may use children but we must not "use them up"; we may use them but we may not "abuse" them.

Teaching is not a matter of might, but of right. It should not be a veiled coercion, the influence of which disappears when we are gone. Children for the most part should be led and not driven. The martinet makes only two species of human beings with his overuse of authority and power: a servile man with no will of his own who will become a henchman to the first ward boss he meets, or an obstinate reactionary who will disregard all

authority once he gets free, becoming anarchistic or licentious, as his unrestraint expresses itself against government or virtue.

If our children are to be free men and women, they must be given freedom enough to learn self-restraint. They must go toward the freedom of adult life by degrees and not by a single plunge. It is a paradox in the growth of human life that true obedience to authority in adult life is the product of a properly directed liberty in youth. Let the child's impulse play free while he is yet in awe of this world and its human masters, then he will take to heart the failures which his impulses register as they strike against other human personalities. Lead children into life, and guide them. They are not much conscious of right and wrong in the beginning, they merely wish to express themselves; give them the better way you know, else they will use their own crude manners of meeting life. The leader of men is he who reads the discontent and eagerness of men and gives them voice. The teacher leads children by understanding their needs and offering, out of his greater wisdom, adequate ways for expressing them.

If he adjusts to their vague, mumbling desires with only his own selfish interests in mind he is a cheap politician. If he gives outlet and form to their vague emotions, always with regard to the child's own ultimate good and the final good of institutions, then he is a statesman. Teaching is only a form of statesmanship where the personal and public opinion of childhood is molded to the good of the state. It is different in one fact alone, that it is the leadership of little men and women for a future good, rather than the leadership of grown men and women for a present good.

It is for us as teachers to bring the qualities of professional life into our daily teaching practice and to make the term "teacher" mean four things in one: master, expert, servant, and leader.

TOPIC: OUR EDUCATIONAL ADVANCE AND IMPROVEMENT OVER THE PAST

A. IN THE CITY

CHARLES E. CHADSEY, SUPERINTENDENT OF SCHOOLS, DENVER, COLO.

To assert that the problem of the city school is now far more complex than it was a few decades ago is merely to give utterance to a truism. Originally the city school system was merely a multiple of individual schools, just as the large building was at first simply an association of schools of similar types and ideals. When the function of the school was confined to the attempt to secure reasonable familiarity with the "fundamental" studies, the administration of whatever school system existed was very largely a matter of routine business and disciplinary control.

Coincidentally with the general industrial expansion of the country

and the increasing complexity of business and social life came the modern school system. It widens yearly its sphere of usefulness and attempts courageously the solution of every problem which a people inclined to socialistic remedies passes over to its province.

A typical school system is rapidly becoming an organization difficult to describe or even to appreciate. As its foundation it still adheres to an elaborately organized grade system in which teachers work with large groups of pupils of comparatively similar general preparation and age. This ideal is found governing lower grades almost without exception. The higher elementary grades in many school systems and high schools everywhere have substituted for the grade teacher a specialist in some subject or group of subjects. This substitution has been made upon the assumption that the more specially trained teachers can thereby secure better results. This assumption has been sufficiently successfully realized to justify the acceptance of the departmental system as typical in high school and upper elementary grades of the normal city school system.

If, however, this group of schools where pupils are assembled together by a mechanical system of gradation and promotion was representative in any adequate sense of the modern school system, educational advance over the past would be far simpler to describe than, as a matter of fact, it is.

Even if this were true it would still tax the limits of any paper to attempt more than a highly inadequate description of genuine advance along numerous diverse lines of activity. It should include advance in architectural construction of buildings, improved professional preparation of teachers, and higher requirements of admission to the ranks of city teachers. It should not overlook the fact that we are securing better equipment, genuine compulsory education, more intelligently organized courses of study, progress in form and content of textbooks, the beginning of more adequate pension systems, and the securing of materially higher compensation to teachers.

Such a résumé also should call attention to the elimination to a very considerable extent of the more offensive forms of political interference and the establishment of effective methods for the selection and appointment of teachers on the basis of merit only.

It should finally emphasize improvements in the business and educational administration of the schools, including the acceptance of the small, representative, effective Board of Education and the recognition of the city superintendency as an office which can be filled capably only by an educational expert.

In omitting all consideration of such topics as these just enumerated and of many others which might easily have been included, I do not wish to imply that the advance along all these lines is not of tremendous

significance. A complete consideration of educational progress would very properly include extended treatment of each as a special subject.

Nearly all of these topics illustrate a progress which has been going on for decades. They are striking illustrations of the general truth that with each added complexity of life and civilization there come corresponding adjustments on the part of all existing institutions to meet the new needs.

In reality none of these advances, marked as they are and significant of a far more adequate and intelligent handling of our problem, constitutes the really vital difference between the typical school system of the past and the present.

I should describe this difference as the developing of the power to appreciate the needs and demands of the individual. To furnish to each boy or girl the opportunity to secure the particular training most demanded by his ability, limitations, tastes, aptitudes, and presumable future activities is now the great problem of every progressive school system. This problem is attacked in almost every conceivable way. Naturally many of the schemes, devices, and methods now offered in the effort to solve this problem are hopelessly inadequate. The real advance over the past lies in the recognition of the necessity of bringing about in numerous different ways a genuine flexibility in the gradation, assignment, and advancement of the individual pupil.

The purpose distinctly in mind is to secure the overcoming of the lamentable waste of time and energy which characterizes any school system wedded to the traditional forms of classification and promotion, undefiled by the modern special school, special teacher, and special plan of organization designed to make the training actually fit the child.

What are the specific forms thru which the city school of today differs from the mechanically perfect yet lamentably rigid school system of the past? They are the practical realizations of nearly all the subjects assigned for special discussion at this and almost every educational meeting of the past decade.

Not all of them are found in every school system. Local conditions have frequently prevented their establishment even where from many standpoints a high degree of educational efficiency has been secured and maintained.

But everywhere we find educational administrators alive to the need and hopeful that the end sought, more genuine efficiency, will soon be realized.

The modern school system is dynamic to the core and the superintendent not fully alive to the necessity of carefully and continually revising and adding to his point of view is doomed to failure.

Every community realizes with daily increasing clearness the nature and importance of educational efficiency and demands with growing

persistency the establishment of specific forms looking to the fulfillment of their hopes.

The recognition of the place of industries in education, the idea of the school building as the community center, and the establishment of the department of physical education as of equal dignity and importance with that of so-called intellectual training mark one side of the humanizing of the modern school.

The other manifestation of the effort to present opportunities thru which the child of any environment, heredity, aptitude, or limitation may secure that which is for him the most effective training is found in a variety of plans, each marking a distinct variation from the traditional graded system.

Among these can be mentioned the ungraded school found in many school buildings, the rooms or buildings for children of foreign birth unable to speak the English language or badly retarded in their work thru a late start in American schools, and the various types of evening and continuation schools. We should notice also the school for the backward child, and the special school or group of schools for children retarded thru ill-health, irregularity, or absence from school. Of equal importance is the school for the gifted child, he who can easily accomplish more than the curriculum plans as the work for the normal child. Not unimportant in the general scheme are the schools for the feeble-minded, the epileptic, the crippled, the deaf, and the blind. Distinctly significant and promising are the open-air schools for the anaemic, the tubercular, and even for the normal child whose parents believe in a purer, fresher air than that found in the ordinary schoolroom; the parental or truant school, the school for the juvenile delinquent, the elementary industrial or commercial school, the manual-training movement now developing into the technical school, and the trade school. Many variations of these efforts could be enumerated, the difficulty being the determination of a genuine distinction as to type. All are alike in their underlying purpose of securing more genuine efficiency.

Among the efforts to accommodate the city school to the needs of its constituency, the one most prominent in educational discussions and most conscientiously studied by all interested in education is the establishment of vocational education.

This paper cannot attempt to present this problem, yet a résumé of educational advance must not fail to include this movement for genuine industrial education. Only a few cities have attacked seriously this problem but the great interest excited everywhere in their experiments indicates clearly that within a few years we shall have many types of vocational schools in our larger cities. These schools are developing along three lines:

First, the elementary industrial school designed for those who will not go beyond the elementary schools and whose limitations or obvious future activities are such as to make the customary work of the elementary school comparatively valueless. A school providing some academic work and emphasizing strongly training designed to furnish fundamental equipment for many kinds of manual activity offers a partial solution for one vexing and discouraging problem of city schools.

Second, the technical or industrial high school with intensive training for a number of vocations combined with fundamental mechanical training and narrow but effective academic work. This type of school offers a most promising variation from customary secondary training and bids fair to furnish a practical vocational education far less vulnerable to a certain kind of criticism as to public-school efficiency than any heretofore connected with the system of secondary education of the public schools.

Third, the pure trade school, offering to young men and women at the public expense and as an accepted department of the public-school system specific narrow training for definite trades or occupations, with the intent that these young people can become wage-earners in their trades with a training which will enable them shortly to become skilled workmen.

This, while the most discussed and most strongly demanded type of vocational education, is found in only a few of our American school systems. That the trade school is destined to play an important part in the modification of the schools to fit the needs of the individual is unquestioned, but this particular differentiation will be a characteristic of the future city school system rather than of the present.

The movement for a wider use of the school plant, involving the idea that every school building should eventually become a genuine community center, devoted to all that makes for a more efficient citizenship, while yet in its infancy, bids fair to become a most important factor in the modification of many matters connected with school organization and management.

This extension of the use of the school plant—the idea of the school building as the community center—is resulting from an increasingly general acceptance by the public of these fundamental facts: first, that the education of the individual is a process not culminated at any particular time or place; second, that education at public expense is in the last analysis a wise investment of public moneys; third, that the continuation of the education of the individual into maturity, whether physical, social, intellectual, or moral, brings economic and social benefit to the entire community.

Recent years witness marked advance in city school systems in the physical welfare of the children. This is manifesting itself in many

different ways. The overcrowded schoolroom with an insufficient supply of pure air is being replaced everywhere by rooms having a smaller number of pupils assigned, more ample floor space, and equipped with modern systems of ventilation assuring a continuous ample supply of fresh air.

Even more recently has come the gospel of the open-air school, designed in some places to assure conditions within the room closely approximating at least the idea of a schoolroom on a porch protected overhead and on two sides. Such rooms enable pupils and teachers to work during large portions of the year under hygienic conditions not essentially different from outdoor life.

Some school systems have already been able to go even farther and to carry on during portions of the year schools actually in the open. Schools of this type have been designed to enable children of enfeebled physique, unfortunate heredity, or unfavorable hygienic environment to overcome as far as possible their original handicap and improve their physical condition while incidentally holding their own in educational development.

These schools are rapidly passing out of the experimental stage and winning for themselves an assured place in the public-school system. Details of management, the medical inspection involved, the amount of trained nursing necessary, the character of the food furnished, and the amount of additional expense justified by the results are matters far from standardized. The fact that the special school of this type will soon be found in all effective school systems must be admitted.

The installation in the city school system of medical inspectors and school nurses marks another effort to provide more effectively for the physical welfare of the child. Thru their skilled services the danger of the presence in the school of those who are physically unfit is avoided, defects and disease are remedied, suitable segregations become possible, and a general improvement in all hygienic conditions results.

We shall soon secure thru these agencies systematic records and studies of the individual child which will point the way to still further effectiveness in securing more ideal physical education and environment.

The supervised-school-playground movement shows wonderful activity and promises much that is most helpful and valuable. This movement is receiving such enthusiastic support from all interested in civic betterment that one finds difficulty in determining with any degree of definiteness its possible future extension or its probable limitations.

Out of it will certainly result conditions far more favorable to the existence of true sport, of fair play, and to extended participation by our boys and girls. The danger of evil associations, too often the menace of the unsupervised play, will be greatly decreased, and the physical growth and betterment which accompanies proper sport and

the physical activity of the outdoor game will be insured to a far greater degree than heretofore.

The varieties of special schools now found in connection with city systems, all designed to furnish the specific training needed by the individual child, are too numerous to permit of anything approaching effective description. The recent emphasis given to retardation is resulting in efforts not only to overcome the causes and so greatly to lessen the amount of retardation, but to establish schools planned to cater directly to the needs of those who have accomplished less than they should and have fallen behind in their educational advancement. These schools are demonstrating most conclusively how often the child hitherto discouraged and a laggard will respond when placed in more favorable environment, under teachers whose sole duty it is to find the seat of the trouble and to remove it, if possible.

Another form of special school tending to increase the flexibility of the graded-school system is that designed for the pupil able to do more than normal work. Under the unmodified system of gradation and promotion the unusually gifted child suffers. The extent of injury to those of this class is as yet scarcely realized either by parents or teachers. In numerous places, however, we now find tentative efforts to meet the needs of this class and to prevent thereby the deadening of power and the temptation to the formation of habits of idleness or worse. This type of school will at least lessen the unnecessary waste of time, which constitutes a present vital criticism of the public school.

Finally, a complete recognition of the possibilities of extended use of the special school for the retarded, the backward, the bright, and the misfit will result in such a breaking-down of the old grade system that the old-time adherents will scarcely recognize it.

Any school system having definitely committed itself to departmental work and to special schools or teachers for the various types of pupils differing from the average or normal soon will be forced to the final step away from that which up to very recently has distinguished the elementary from the secondary school. Promotion practically by grade only is still the custom in the former. Promotion by subject has long characterized the latter.

Most of us still work and reason by custom and hold to our traditions. But change and advance, generally permanent and effective, have come so rapidly that before long the fetish of the grade as the necessary mechanical system of a public school, without which all would be chaos, will have lost its grip upon us and we will have realized fully that which is the characteristic of the educational advance of city schools in recent years, the breaking-down of mass education and the substitution of the problem of the intelligent treatment of the individual child.

B. IN THE STATE

CHARLES P. CARY, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, MADISON, WIS.

This is a large topic for so brief a time. When the history of education in America comes to be written in future years the period thru which we are now passing will doubtless be regarded as little less than an educational renaissance. No great revolutionary changes are occurring, but evolution is proceeding with unexampled rapidity. Enormously increased appropriations, both local and state, have almost ceased to be matters of comment. States that sustain state universities and normal schools have doubled, trebled, and even quadrupled their appropriations to these institutions within a decade. State distributions of money to the common schools are steadily and rapidly increasing in volume. In this respect the states vie with one another, north and south, east and west.

New schools of various kinds are added at every legislative session in most of the states of the Union. Agricultural schools of various types seem to predominate, but training schools for teachers, industrial and vocational schools of various sorts are rapidly multiplying.

In nearly every state of the Union there is a marked tendency to increase the qualifications for teachers. It seems to be the ultimate and not very distant aim everywhere to require professional training of all teachers, with the possible exception of college and university teachers. The proper training of country teachers is the most troublesome problem to be solved in the most of our states, but the experiments that are in progress everywhere indicate a determined effort to solve the difficulty. Fortunately no state in the Union is content to contemplate the development within its boundaries of a class of uneducated tillers of the soil, whether white or black. With some notable exceptions our farm population the country over seems to educational leaders to be apathetic with respect to education beyond the meager elements found in the textbooks devoted to the common branches. They are disinclined to spend money, beyond the meager necessities of the case, in school buildings, school equipment, and teachers' salaries. As a result there are going on in every state that is educationally awake campaigns of some sort designed to stimulate the interest and pride of the farming population in their schools. Sometimes it takes the form of whirlwind campaigns, sometimes school-board conventions held in each county in the state, sometimes contests of one sort and another planned for the purpose of stimulating the interest of the farm boy and girl and thru them the interest of the community. There is no greater educational problem in America today than that of reaching and rousing the agricultural population to the tremendous importance of suitable schools

and competent teachers. State departments of education are keenly alert to the situation, but doubtless inventive ingenuity will discover many new ways of carrying on the missionary work which is so greatly needed. I doubt if any of us yet have utilized as fully as we should the public press in carrying on our campaigns of enlightenment. I doubt if we have yet done as much as might be done thru pamphlets, bulletins, public addresses, and local organizations. If I had but one word of exhortation to give to my fellow-workers it would be, Let no day go by without racking your brains for new ways and more efficient ways of enlightening our country communities as to the value of the right kind of education and stimulating in them the desire to secure for their children the most in the way of education their circumstances permit.

There is a notable tendency, particularly in the South, to increase local taxation for school purposes. The educational leaders of the South have rendered splendid service to the cause of education by developing the sentiment of local initiative in this respect. When communities begin to tax themselves for educational purposes they are on the highway to all sorts of educational progress. The more they do for themselves, the more they want to do. Notwithstanding the grumbling that we hear everywhere as to taxation, there is nothing that tends more strongly to educate a community in the right direction than discussions with respect to the proper expenditure of money raised by taxation for school purposes.

Another tendency that is rapidly developing thruout the nation is that of taking educational affairs out of politics and putting them on a professional basis. This is particularly noticeable with respect to the chief school officer of the commonwealth. The state of Pennsylvania, for example, has at the head of her school system a man, an honored member of this department, who has been appointed again and again by successive governors regardless of politics. When his present term expires he will have served for a period of twenty years. The state of New York has appointed a man for life to a similar position. The state of Massachusetts has taken for her chief school officer a man from the faculty of Columbia University, not even a resident of the state. These are a few of the more notable instances of the complete subordination of politics to the cause of education. City superintendents today are rarely, if ever, selected on a political basis. County superintendents are likewise rapidly escaping from the political yoke and are coming to be regarded in the most progressive states of the Union as professional men and women of high standing. It is to be hoped that the time will soon come when every state and county superintendent who is efficient and who does not meddle with politics in a partisan way will be regarded by his educational equals as filling a position that they would no more think of attempting to displace him from than they would think of

attempting to displace, for their own benefit, a man who fills any other educational position. In other words, professional honor and courtesy should be extended to state and county superintendents the same as to any other sort of educational workers.

Along with increasing qualifications of teachers may be noted a more or less rapidly increasing salary scale for teachers, supervisors, and superintendents. While salaries are still far below the level that we believe should exist, the change that is in progress in most states is highly encouraging. In the last analysis the salary question is the most vital question involved in our educational progress. Increasing salaries will draw into the profession men and women of larger ability and better training than those they displace. Stationary or decreasing salaries will drive from the profession all except those who have a passion for teaching and those of such indifferent capacity that they cannot hope for anything better in any other field of effort. Mediocre teachers must ever be associated with moderate salaries, but high salaries will attract talent in this profession as in any other. The higher salaries are the result of increased intelligence and interest in education and these are the result, in large measure, of intelligent state activity in the cause of education. Even more than in the case of teachers, the salaries of supervisors and superintendents are increasing. The most progressive states in the Union are today making special efforts to train a body of professional superintendents and supervisors of education. It should not be forgotten that with a greater appreciation of the superintendent's function there goes an increased amount of clerical help which enables the superintendent to be something more than a mere clerk dealing with educational statistics and school supplies.

It is coming to be keenly felt by the educational leaders in many of our states that anything more than a common-school education is likely to become rather rare for any except those who have the good fortune to possess wealth. Educational departments and legislatures the country over are interesting themselves in securing, so far as possible, equal educational opportunities for all. Equal wealth for all seems out of the question under the present economic order, but society should leave no stone unturned to bring the highest educational opportunity to the door of those who care for it. The country high school has become a necessity; and if the people immediately concerned are indifferent to it, it should in some way be thrust upon them by society at large. There should be state aid to weak school districts, both for common-school education and for high-school education, and there is a strong tendency toward a larger unit of taxation.

Compulsory-education laws and factory laws are rapidly assuming effective form the country over. Fourteen years of age is the usual limit of compulsory education, but I have little doubt that sixteen

years will be the lower limit in most of our states within the next decade. Children from fourteen to sixteen, just entering the adolescent period, are in the most susceptible stage to educational influence of any period in their lives. If they are not educated in the schools they are likely to fritter away their time, get into occupations that have no future outlook, or develop habits of idleness that a lifetime cannot cure. The idea of continuation schools and night schools is rapidly growing, and yet we have everywhere great cause to be distressed at the lack of efficiency and sufficiency of such institutions. We are rapidly coming to see that education of an exclusively literary type is adapted to comparatively few children. The industrial or vocational side makes a more immediate appeal to many and can readily be made educational to a remarkably high degree. To this idea and to the industrial and economic necessities of the case are due the rapid development of agricultural schools, trade schools, and the like, to which reference has already been made. There is a growing conviction on the part of our people that education must be brought nearer to common, everyday life. The idea is rapidly developing that our education has been of too bookish a character, that it has far too much ignored the natural, spontaneous interests of the child in his contact with his environment, and that it has too greatly neglected proper attention to the social efficiency of the child after he leaves the school.

I cannot omit even in this brief sketch allusion to one of the most marked characteristics of our time: namely, state interest in the health of the people. Health campaigns are in progress everywhere. In some cases the stimulus comes from the state board of health, sometimes from the state department of education, or from still other sources, but there is a rapidly growing tendency to require medical inspection in our schools, to require ample playgrounds for school children, to prohibit the common drinking-cup, and so on thru a long list of details. State efforts to stamp out tuberculosis, the hook-worm, typhoid fever, and many other ills that afflict humanity are so common as to impress even the casual observer. State legislatures and state departments of instruction are coming to insist upon the proper construction of buildings, including especially proper lighting and ventilation. The state interests itself in the site of schoolhouses and is ready to condemn unsanitary buildings and unsanitary sites.

The concentration of authority and responsibility in the state departments of education is a marked tendency that has not escaped the attention of educational writers. There is a growing desire for a unified system of education. Courses of study, the licensing of teachers, the construction of buildings, the distribution of state aid, the supervision of the training of teachers, the inspection of all kinds of public education are rapidly passing into the hands of the chief school officer

of the state. Rapidly, but not rapidly enough, needed assistants are being added to the superintendent's department. His function is one that can be satisfactorily executed only by an educational expert of wide experience, reliable judgment, and statesmanlike breadth of view. He should be surrounded by a staff of educational experts.

Dr. Henry Pritchett, head of the Carnegie Foundation for the Advancement of Teaching, is undoubtedly right when he says in the *Atlantic Monthly* for December, 1908, that—

> the absence in nearly all states of the Union of any form of supervision over higher education is a singular feature of our educational history. The absence of any rational supervision or even of any provision for fair criticism or review of our higher institutions of learning is in part due to the attitude of the colleges themselves. College professors have been not a little inclined to look down on those who supervise state schools.

The worst feature of the attitude referred to by the head of the Carnegie Foundation is the insistence everywhere of our state universities that they shall be treated as independent organizations having no relationship with the educational system except in the matter of financial support. They insist upon fixing their own entrance qualifications regardless of the state system of schools and of keeping inspectors in the field for the purpose of shaping secondary education to meet the assumed needs of the university. In some states they have entirely prevented state inspection and supervision of high schools. In a few cases where they were hard pressed or foresaw they might be, they have secured thru the legislature an anomalous compromise with the state in the nature of a board whose function is to determine courses of study for the high schools of the state and direct the inspection of schools. Such a board is a snare and a delusion and is brought about by the efforts of the university to hold its own in the state against the tendency to increase the authority and responsibility of the state department. Such a board tends to produce a fixed order of things as unchangeable as the laws of the Medes and Persians and little adapted to meet the changing needs and conceptions of the communities that support high schools. This is a tendency that should be emphatically checked in every state in the Union, for it is the sort of thing that will inevitably be resorted to, if possible, by state universities in their efforts to preserve their autonomy in relation to the educational affairs of the state. One board of this type determined the course of study and then saw to it that the legislature enacted that course of study into law. The board then went about its business and gave itself no further serious trouble. In another state the board is, so far as this part of its function is concerned, of no effect so far as I can discover. Tho I have been repeatedly assured that the schools enjoy the utmost freedom in the making-up of their courses, I finally discovered by sheer accident, as it were, after hours of talk on the subject, that the university would accept only what

pleased it in the last analysis and unhesitatingly rejected anything that it regarded as unsatisfactory. Such a board as some of our states are at this time contemplating would be at best little more than a debating society for the edification of the members. To meet modern conditions and modern needs the adjustment of courses of study and other educational affairs of state interest should be left in the hands of a capable state supervisor of education of the highest type of professional ability, who can in a rational but not arbitrary manner stimulate here and hold in check there and thus preserve that fluidity that is essential at this time to educational evolution and for the prevention of the necessity of educational revolution.

C. IN THE NATION

ELMER ELLSWORTH BROWN, UNITED STATES COMMISSIONER OF EDUCATION, WASHINGTON, D.C.

Our educational advance in the nation consists in the advance of the idea of national responsibility in educational affairs. The conception of such responsibility has been hammered into us by the friendly criticism of foreign nations. Foreign criticism charges us with educating only a portion of our population, leaving great numbers of our citizens either without schooling, or with schooling for so brief a period and under such unfavorable conditions as to count for little. Foreign criticism charges again that we do not fulfill in the higher grades of our schools the large promise of our lower grades. Dr. Muthesius, of Berlin, for example, has reported as follows regarding American instruction in drawing:

> The results of the instruction . . . . in the lower grades exceed all expectations. In the advanced grades, however, they do not wholly accord with this auspicious beginning. While the work of the children of eight or nine years is so admirable the pupils of fifteen or sixteen often offer correspondingly little that is satisfactory. We should expect from the pupils of the highest grades that in drawing from nature they would have the ability to see form clearly and to apprehend an object accurately. But instruction has failed to develop a disposition to see clearly; the plant drawings of the sixteen-year-old pupils frequently present the same schematic picture as those of the lower grades. Manifestly, this is due to the fact that instruction wholly neglects exercises in accuracy.

Foreign criticism yet again calls attention to the lamentable uncertainty as regards the significance of our academic and professional degrees. The English *Journal of Education* for September 1, 1910, contained the following declaration:

> There is a real evil in connection with the use of American diplomas in England, be it by American or by English citizens. And these facts seem to be beyond dispute: (1) In the United States honorary degrees are conferred in such numbers that they have no real meaning or value. (2) No distinctive mark separates in usage the honorary from the earned degree. (3) The degree by examination is sometimes conferred under conditions that are simply farcical. (4) Many of the institutions from which degrees

proceed are far below the rank of even the smallest European universities, and possess no reputation that can be injured by laxity in bestowing their distinctions. We speak only in defense of our own people. It is the genuine graduates of genuine American universities . . . . that have the greatest interest in effecting a reform.

Even in our neighbor republic of Cuba, a government commission, reporting recently to the Secretary of Instruction on the recognition of foreign degrees by the Cuban National University, referred to

the fact that many American institutions gave degrees with relative facility, which are not regarded as sufficient even in the state in which the institution is situated, as the authorities require an official examination before the holder is entitled to exercise his profession.

It is evident that the reference is mainly to our professional degrees. The commission recommended a restricted recognition of such degrees as given in this country.

The chief significance of this foreign criticism is that it calls attention to defects in our system of education from which our own people are the chief sufferers. The sting of adverse comment from abroad may awaken us to a sense of obligations at home to which long custom had hitherto blinded us. But such foreign criticism has a further significance: It shows that we are dealing with a national, and not merely a local, question. Both our place among the nations and our duty to our own citizens are involved—a nation-wide imperfection or misfortune calls for a nation-wide remedy. But let us not use the word *national* hastily nor carelessly. In speaking of education in and for the nation, I am speaking as a firm believer in the educational rights and responsibilities of the several states. Our national education is the sum total of education in the states, with something cohesive added thereto. That something added is an increasing measure of helpful activity from the side of institutions, both public and private, which are either Federal or distinctly national in character.

National results are not to be accomplished by Federal action merely. They are to be accomplished by Federal agencies in co-operation with mutually co-operating states, with a good deal of non-governmental nationality thrown in. This is a situation that calls for patience, since our national improvements are not to be forced by a stroke of the pen at one single governmental center. But can we not see the overwhelming advantages of such a situation? I believe it offers the finest promise of a rich and varied and spontaneous educational development that is enjoyed by any people. If everything seems to hinder, with insurmountable obstacles, it is equally true that everything helps. An improvement in any corner of the land is a contribution to national improvement.

Now, with such a nationality of many in one, what progress have we been making in this twentieth century toward the correction of such

inadequacies as those already mentioned? What progress have we been making toward better things than the preceding centuries have found attainable? While my answer to this question will have in it the bitter herb of frankness regarding the things we have not yet attained, it will none the less be in full accord with that hopefulness which is the dominant spirit of this meeting.

The mere bigness of our achievements is a familiar story. We know that we have a billion dollars invested in our public-school "plants." We know that for education of all kinds, from the most elementary to the most advanced, we are now spending over half a billion dollars a year. We know that our high schools now enroll over one million students annually, which is more than one per cent of our whole population, while our various institutions of higher education have more than a fourth as many in attendance.

We are so familiar with this talk of bigness that we have begun to tire a little of mere magnitudes. Right here we may find one of the evidences of genuine progress. We are inquiring with a little more earnestness than ever before what these magnitudes shall mean. Numerical statements are sifted and analyzed a little more closely; and the inquiry is made more insistently: What quality is represented in these quantities? Some of the ways in which this attitude has of late been manifested are seen in the movement for the improvement of our educational statistics; in the inquiries concerning laggards in the school grades; in the efforts to provide for more individual instruction, with varying rates of promotion; and in the provision that is making in many directions for the training of exceptional children. The meeting of this department last year at Indianapolis signalized the change that is here referred to, partly in its emphasis upon individual differences among pupils, and partly in the appointment of a committee on uniform statistics. If we could say without reserve that the interest in American education, from the kindergarten to the university, has been definitely shifted from quantity to quality, we should make one of the most hopeful and inspiriting declarations that could be made. I do not venture to make such a declaration; but I believe such a shifting has plainly begun, and some of its finest beginnings are to be credited to the first decade of the twentieth century.

It should not occasion surprise that the movement toward more accurate and comparable statistics should be viewed as a sign of the shifting of emphasis from quantity to quality. It is indeed a most important indication of such a change. We are losing interest in statistics which simply give us ground for indiscriminate congratulation or indiscriminate condemnation. Our statistics are to help us find our way in the face of recognized difficulties. They are to be unimportant in themselves; but they are to be increasingly helpful in the effort

toward improvement. They are to enable us to locate definite weaknesses; and they are also to give us a more precise statement of any good thing that has been done anywhere, and so make it possible to spread improvements more surely from city to city and from state to state.

The first decade of the twentieth century has seen the growth of a nation-wide interest in our educational standards. This is undoubtedly one of the most remarkable developments of the period under consideration. The first steps have been taken toward removing the reproach which has lain against our academic and professional degrees. This company is very familiar with those steps, and they need not be reviewed at this time. It is generally known that the most influential agency in the "standardizing" movement has been the Carnegie Foundation for the Advancement of Teaching, which has done great and unexpected things on the way to an answer to the simple question, What is a college? Various other voluntary bodies have worked together to the same end. In an important sense, this work is already a national work. It is manifest, however, that it cannot become a permanent and universal work till it has passed over into the sphere of government. And it can become fully established in the governmental sphere only by the concurrent action of the state governments, which are the source of all power to grant degrees within their several jurisdictions, and of the Federal government in so far as its jurisdiction over the District of Columbia is concerned. Is it beyond hope or belief that the several states will act in unison in this matter? A few of them, with New York in the lead, have already undertaken to regulate the granting of such degrees. I venture the expectation that the rest will follow in time, till the purchased diploma and the unearned scholastic title shall be altogether unknown in our land. Some of the obvious difficulties in the way of such a program will be lessened if it be understood that an immediate adoption of one standard for all states and all institutions is not to be considered. The thing to be desired at the outset is an agreed scale of standards, upon which states and institutions may range themselves according to their condition and the needs of their people, their place upon such a scale being known to all and freely acknowledged.

A further suggestion should be added. The more mechanical and outward determination of scholastic standards is merely a clearing of the way for the finer, more intangible, and more vital standards which, while they measure spiritual achievements, cannot themselves be measured by any quantitative scale. Such standards are chiefly supplied by great teachers and by groups of great teachers. It would be difficult to say whether the past decade has shown an advance in these finer standards or not. It is a significant fact, however, that

it is a decade in which there have passed from this earthly scene such teachers as Shaler and Sumner and William James and Harris and Le Conte and Harper and McIver and Curry (for I am using the term "teacher" in some of its wider meanings) and Alice Freeman Palmer and a large company of their inspiring associates.

Just at this time I am particularly interested in American standards of elementary education. We are coming only by slow degrees to any general agreement concerning the norms by which a common school or a system of common schools may be judged. Some beginnings have been made in the application of definite measurements in this field. For the most part, however, we try to gauge its successes in a rather broad way, by reference to prevalent practice in progressive communities, by general conceptions of the aims and possibilities of education, and by the common-sense which emerges from wide experience. There is a prevalent tendency, manifest in some recent articles, to measure the progress of a city system of schools by the agencies organized for doing things beyond the ordinary scope of the schools. I cherish a strong belief in those activities which are referred to as the wider uses of the school plant, and I have been reading, with special pleasure and satisfaction, Mr. Perry's book upon those wider uses. But I think it cannot be denied that the wider uses may be most safely and effectively cultivated in a system of schools which is sound and strong in its main, central core. It is no easy task to judge fairly of the strength and soundness of that central core, nor is it easy to say, with precision, whether real progress has been making or what progress has been making within a decade as regards the central and essential excellence of our teaching. I believe, however, that substantial progress has been made and that such progress will continue thru the years that are to follow. Our cities play so characteristic and leading a part in our national civilization and their influence and standards are so largely independent of the boundary lines of the states, that the things which concern their efficiency must be regarded as a national interest, and their co-operation for the improvement of city-school standards generally must appear as a patriotic and national service.

There are four lines of improvement respecting fundamental facts of school education which call for emphasis. They are school attendance, teachers, buildings, and supervision. In these fundamentals, any national improvement is dependent almost wholly upon the independent efforts of the several states. From the side of the Federal government, only information, with incidental advice, can be offered. It is encouraging to note signs of positive improvement in these particulars within the decade past. The percentage of our school population enrolled in the schools has not greatly changed. But school attendance is more regular and for a longer annual term. In the larger

cities, attendance for the first half of the elementary course is now in a fairly satisfactory condition. With all of their differences in detail, the statisticians agree that attendance in the latter half of the elementary course, even in the larger cities, still shows a lamentable falling-off. The area of compulsory school attendance is gradually widening, and it seems inevitable that before long all of the states will agree in providing for such compulsion. The dovetailing of compulsory school attendance with provision against unsuitable employment of children is gradually coming to greater effectiveness.

Great improvements in schoolhouse construction date from the Collingwood fire. Supervision has made notable gains; indeed, some of the most hopeful signs of progress are to be found in this part of the field. Normal schools, state and city and county, are prospering, and our teaching force is gradually working toward the point where all of its members will have had some measure of professional training. One of the most interesting efforts toward definite co-operation between the states is the effort to arrive at a satisfactory basis for interstate comity as regards the granting of teachers' certificates.

Taken altogether, the past decade has been a time for overcoming mere state and sectional and institutional isolation. There is still isolation—too much of it altogether—and the defects that arise from isolation. But there is less of isolation, and more of conscious unity, than there was ten years ago. The sense of a common cause is here. All of the aspirations and obligations of nationality lend force and sacredness to that common cause. We are helping each other a little more than we did, and each receiving a little more help from the rest. We are keeping step together, not under military compulsion but under the joyous consciousness of common aims and mutual support—keeping step—keeping step—and marching forward, all over our common land, to ends that are our country's, our God's, and truth's.

DISCUSSION

Leonard P. Ayres, associate director, Russell Sage Foundation, New York, N.Y. —The Department of Superintendence has always believed in the United States Bureau of Education, ever since bringing about its creation nearly fifty years ago. During the past year members of this Department have been engaged in an attempt to secure larger Federal support for the bureau, and of this movement and its results I wish to give some account. Former attempts to widen the activities of the United States Bureau of Education have failed largely because the requests have been in the nature of general appeals for the enlargement of that bureau. Members of the United States Congress have never been greatly interested in enlarging the United States Bureau of Education. Another reason for the failure has been the fear of the states that the government might encroach upon their rights in the field of public education.

The hope of the present movement consists in the fact that the appeal is not a general appeal for enlargement, nor in any way an interference with the rights of the states. Those directly interested in promoting the efficiency of the United States Bureau of Educa-

tion at this time aim simply to secure a field force of expert scientific investigators for the purpose of ascertaining more adequately the facts of present practice and making available to each school worker the experience of all. The efforts put forth to convince legislators have assumed the form of letters, literature, personal effort, and telegrams. There has been a splendid response from many quarters of our country, especially from the educational people.

The Commissioner of Education and the Secretary of the Interior have united in working for the appropriation of $75,000 for the establishment of the corps. The recommendation was approved by the subcommittee of the House of Representatives and by the general Committee on Appropriations, altho the ten specialists asked for were reduced by them to two. When the matter was brought before the House of Representatives it was discussed for a longer period than any educational measure of recent years. The Senate committee seems to be favorably disposed and it now seems probable that Congress will provide for three specialists. The work in behalf of the measure had been of great interest and enlightenment to the legislators and has made possible a fine advance.

In conclusion: There is a need for a committee of this Department on the Bureau of Education, and I bespeak your support for the resolution which will be submitted by the Committee on Resolutions relating thereto.

J. George Becht, principal, State Normal School, Clarion, Pa.—Within the past quarter of a century the lines of advancement have been in the direction of finding a national basis for the training of children and in a sensible appreciation of what scientific method and management may accomplish when applied to the common arts of life. The truth of this last statement is significantly reflected in the periodical literature of the day as never before. The standard literary magazines are giving over their columns to the propaganda that education to be efficient must relate itself to these common arts of life; that education means adjustment and conservation; that adjustment means adapting one to his environment and conservation means eliminating the waste of human effort. This widespread discussion on the part of the laymen in educational practice is one of the most hopeful signs in the educational firmament. It is a just appreciation of what science may do when practically applied and will in the end work a moral, social, and economic revolution.

Frederick W. Taylor, a pioneer in this direction, shows in a very conclusive way what may be accomplished by applying the principles of scientific management to the activities that range from carrying a hod to the highest expressions of physical labor. As an illustration he takes the trade of brick-laying, which has been carried on in the same way since the days of primitive man. But science steps in and asks, Why lower a hundred pounds of human flesh to lift a four-pound brick? Why shall a brick-layer toss a brick three or four times to find its best face? Why tap it three or four times to get its proper level? Why stand in a position that requires a half-dozen movements when one would suffice? And science gives the answer. Build the platform for the bricks so that it can be easily adjusted to the height of his work. Lay the bricks on the platform with the best face in position, make the mortar of uniform consistency and a single tap will be sufficient; and take a position that will eliminate useless movement.

M. L. Brittain, state school commissioner, Atlanta, Ga.—In the general progress which has been shown I desire to emphasize two subjects in particular in which the development has been marked during recent times.

One of these is the increasing attention paid to health and hygiene.

It was Herbert Spencer, I believe, who was really responsible for much of the emphasis which our schools now place upon the study of our bodies and the art of right living. In his *Essay on Education* he refers with fine scorn to those who have so persistently exalted the merely ornamental over those studies which are so vitally worth while. We are learning the lesson the great philosopher taught and not only have placed physiology

almost universally in the courses of study of our public schools, but of late are striving to reach the subject in still more practical fashion. "Health Days" and "Cleaning Up" anniversaries are being celebrated, and special occasions are being used to direct public attention to these important matters. They are even yet, however, not well enough emphasized altho history and common-sense show their importance. The Greek mind—the greatest of the centuries—ran most swiftly along the pathway of literature and learning when it dwelt in a body which thru training and culture was the wonder and admiration of the world.

The other point to which I shall refer is the increasing attention paid to the teaching of agriculture. The rapid growth of urban life and depopulation of our farms have been brought forcibly to our attention, not only by the figures of the Census Bureau, but by the increased cost of living as well. Nearly every man who comes to the city from the country becomes a consumer instead of a producer. The increase in the first class and the loss to the second naturally have an important effect on the cost of food and clothing. This injures everybody concerned and yet the migration is unnecessary and frequently undesired even by those who make the change. Our books and courses of study have tended cityward in their influence and are yet too much inclined to give instruction on stocks and bonds instead of fields and crops. If we had devoted some of the educational money we have been spending to make doctors, lawyers, teachers, preachers, and merchants toward giving instruction in agriculture it would have been better for us all. The very subject in which we are most vitally interested has been a sort of Cinderella, sitting disconsolate in the ashes while her haughty sisters flaunted their proud plumes thru the culture courses of the average curriculum. It is perhaps as important for the urban child to acquire some knowledge of Nature and her products as for the one living in the country, for it was no meaningless myth which the classic story told of the renewed life and vigor which came to the wearied Antaeus from contact with his Mother Earth.

But to make this teaching effective we must bring to it the same interest and energy which have achieved success elsewhere. Above all there must be enthusiasm in the work.

PRELIMINARY REPORT OF THE COMMITTEE ON ECONOMY OF TIME IN EDUCATION

GIVEN BY PROFESSOR HENRY SUZZALLO IN THE ABSENCE OF PRESIDENT JAMES H. BAKER, CHAIRMAN OF THE COMMITTEE

The chairman of the Department of Superintendence has given me only ten minutes in which to make a preliminary report for the Committee on Economy of Time in Education. Any thoro report is, therefore, out of the question, and I shall confine myself to the presentation of the three important conclusions of the committee that bear on the motion to be presented at the conclusion of this presentation, namely, that the Department of Superintendence appoint a Committee of Five on Economy of Time in Elementary Education to work in connection with the general committee appointed from the National Council.

A SHORTENED PERIOD OF GENERAL EDUCATION

Our first proposition is that the period of years now allowed to general cultural or liberal education by the existing organization of our school system is too long, and should be abbreviated. The committee specifi-

cally recommends that the period of general education should close by the twentieth year.

There are many substantial arguments for such a recommendation, of which only a few may be mentioned here.

In the first place, the period of plasticity during which a human being can be profitably educated is not coterminous with life. People may be flexible and educable to the end of life; but the period of greatest educability closes for most by the end of the twenties. There is considerable variation in individuals, but, in general, a man who has not found his work and place in life by the time he has reached his thirtieth year is indeed unfortunate. His chances of success are greatly diminished.

If the period of plasticity is thus confined, it is essential that every important and requisite mode of training fall within the period of plasticity. Now the modern contention is that a man's adjustment to the world in which he lives is dependent upon three types of training: (1) A general or liberal education which will give him a command over those human institutions in which he holds a membership in common with other men; (2) a specialized vocational education which will fit him for his particular economic function; and (3) an apprenticeship to his specific work and station in life which will snugly fit his theoretic education to the concrete and practical situations which he must meet.

If our scheme of general education takes till the age of twenty-two, vocational education and apprenticeship, at least for those who go into professions, must be crowded into the six or eight remaining years of plasticity. This would seem to be a disproportionate allotment. More often than is desirable, if observation counts for anything, the college graduate is left without the eagerness and adjustability to pursue his vocational education and to undergo the specific and somewhat trying apprenticeship thru which the world insists upon passing its young. The ordeal of doing practical work in a subordinate position ought to be presented a year or two earlier to most boys, say at the age of twenty. That such a plan is wise on theoretic grounds is apparent; that it is a feasible practice is proven by experience abroad and at home.

For the most part, England, France, Germany, and other less important European countries have a system of school organization which provides for a completion of the period of general education by about the eighteenth year. There are variations in the cases of both individual persons and particular institutions, but the general practice proves the accuracy of the contention that the period of general education may be closed earlier than is the case with our general American practice without any appreciable loss of efficiency and, indeed, with an appreciable gain.

The American school organization is, in its lengthened period of

general education, an anomaly among national systems of education—an anomaly created by an accident of history. Once the American youth completed his collegiate training four or five years earlier than now. This period has been extended by an increased standardization of the academic attainments of the lower schools enforced by higher institutions. The German university and the English college, once parallel developments and roughly covering about the same age period, are, in America, treated as institutions of different grades, the German university being superimposed upon the Americanized English college.

Such attempts as have been made in the United States to shorten the period of general training by two years substantiate the European experience. Wherever the professional training has been provided at the beginning of the junior year of college we are led to believe that the articulation has been successful. So successful has it been in the eyes of the university administrators that the association of state universities has declared for a distinct articulation at the close of the second collegiate year.

On these three grounds your committee on economy in education believes that the period allotted to general education should be shortened two full years: (1) In order that vocational education and practical apprenticeship be given a fairer share of the period of plasticity; (2) because European experience proves the feasibility of such a plan in general; and (3) because such preliminary experiments with a shortened period in our American schools determine its feasibility for American students.

A NEW ARTICULATION OF OUR SCHOOLS

Our second proposition is that the period of general education should be differently subdivided—more specifically, that six years be given to elementary education, six to secondary education, and two to that collegiate training requisite as a proper introduction to professional education.

Careful investigation of all the distinctions made between elementary, secondary, and collegiate education fails to reveal any large functional differences. Collegiate education is an intensification and expansion of the culture of the secondary schools, as that of the secondary schools is an enlargement of the liberal training given in the elementary unit. Another substantial difference is, that each higher school presents an increased degree of variability that personal ability and ultimate vocational placing may be taken into account. It is because lawyers, doctors, ministers, and teachers in higher schools, more than any non-professional class, have a far-reaching influence on the fundamental institutions of life that we demand of them a preliminary education extending thru the college. It is because the skilled craftsman and the

larger man of business have a more general influence on common affairs than the unskilled workman and the commercial shop-clerk that one usually goes thru high school and the other does not. The articulations express the degree of general training which society in its rough wisdom decrees as necessary to protect the wider social interests which tend inevitably to be affected by the spirit and method of a particular vocational group.

If such is the real distinction between elementary, secondary, and collegiate education, then there are many reasons for believing that a division of the first twelve years into two six-year periods is better than the unequal eight- and four-year division we now have.

In the first place, such expert testimony as we have indicates the presence of considerable waste time and energy in the elementary school. There is a very widespread belief among school men that the fundamental facts, habits, attitudes, and ideals demanded by the general needs of our civilization can be fixed in the nervous system of the child in six school years.

In the second place, the compulsory-education law under our present organization gives society control of the child only long enough to guarantee the abler child eight years of general training. It cannot guarantee him the additional years of vocational education required to make him an efficient, self-supporting, and self-reliant citizen.

To shorten the elementary school to six years without impairing its efficiency is to allow two further years of control that will guarantee every child, who does not go to the high school, some vocational education. The need to guarantee some vocational education to the retarded students is so important that many careful students of social conditions are ready to say that the compulsory school age must be extended to sixteen years so as to carry the least able elementary-school children who now get no further than the fourth, fifth, or sixth school year, thru one, two, or three years of vocational education.

In the third place, the six-year articulation is regarded not only as a better ending-point for the general elementary studies but as a better beginning point for the secondary studies. There are certain inner physiological changes that usher in adolescence that now occur at about the time when the average child makes the transition from elementary to secondary school.

The strain of outer and inner conditions are more or less coincident. Therefore the resulting school mortality is likely to be larger than it ought to be or school life is continued at a larger physical and nervous cost than ought to be the case. It would be a distinct gain for a child to get fairly well started and adjusted to his new school life, vocational or secondary, before the full weight of physiological and nervous changes are thrust upon him. The two adjustments can be better cared for in series than together.

Again, it is the opinion of schoolmasters in general that, for those who have the peculiar mentality to go on to the ordinary academic high school, it is decidedly more profitable to begin the foreign languages at twelve than at fourteen years of age. The same advantage may be held in other subjects where a large acquisition of facts is necessary to successful work.

In the case of those children who are more given to action than to abstraction it is equally profitable to begin to center their intellectual work about an active vocation early. To begin vocational education, with its practical life-career appeal, at twelve rather than at fourteen is to save many children from truancy and disinterest. It will extend their school life so that they are not too early driven into unprofitable and futureless employments. They will still take up much general training parallel with their broad study of vocational work.

A six-year articulation will force a needed economy in the elementary school; it will permit the state to guarantee some vocational training as well as some general education; it will permit the child to get started on his school adjustment slightly before adolescence overtakes him with its strain of inner reconstruction; it will permit an earlier differentiation that will better meet individual and class needs.

Our third proposition is that the elementary-school curriculum should be rearranged so as to shorten the time distribution by two years. The advantages of such a step have already been argued. It is now merely a question of practicality. We have only to turn to the concrete efforts in this direction that have already been made by American school men. Such experiments as have been tried in American schools and school systems under practical operating conditions prove with certainty that the elementary school may be reduced to seven years; and that there is an almost equally strong probability that the articulation at the close of the sixth year would be fully as efficient.

The main requirement at this point in our progress is to investigate the waste in the elementary schools and to make definite proposals for eliminating the archaic and least useful materials of the course of study and to propose more economical methods of teaching.

To this end, I move that the Department of Superintendence appoint a Committee of Five on Economy of Time in Elementary Education, this committee of practical superintendents to co-operate with the general Committee on Economy of Time in Education.

AN EDUCATIONAL EPOCH IN NEW AMERICA

GEORGE E. MACLEAN, PRESIDENT, STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA

The general topic of this Convention, and its admirable program, have proven that the first decade of the twentieth century is an educational

epoch in New America. In the language of the stars an epoch is the point at which a star seems to halt and from which its future orbit is calculated. This decade is a turning-point in the star ascendant of education in the starlit firmament of New America. Isn't it a glorious time to go star-gazing together? There have been other brilliant epochs bringing in the new, but none greater than ours, for they all have been preparing ours and shine thru it. Paul, the greatest man of history, who beheld a heavenly vision, exclaimed, "Behold, all things are become new," and his compeer, John the seer, beheld a new heavens and a new earth. Therefore the new and, necessarily, progress have characterized the Christian era from that epoch to this. The epoch of adventure and exploration incarnate in Columbus discovered a new world, led our forefathers on as pioneers, made us discontented until we discover the earth's poles, and in the field of truth never-resting pilgrims of progress. The epoch of settlement tied down the new to the old nationalities—New Spain, New France, New England, New Amsterdam, Nova Scotia, New York, New Brunswick, and even New Jersey. Naturally Harvard was planted at Newtown, later Cambridge, Yale at New Haven, and Kings' (Columbia) at New York.

The epoch of 1776 with Washington and the Revolutionary fathers gave us a new republic, a United States of America, in reality only a confederacy of the new old colonies. The era, however, of political liberty was insured. The twenty-five hundred living graduates of the nine colonial colleges at the outbreak of the Revolution were leaders of the sons of liberty, furnished about one-half of the field officers of the militia, the larger share of those in the Continental Congress, and four-fifths of the signers of the Declaration of Independence.[1] What wonder that the attempt was made in the Federal Convention of 1787 to give Congress powers over public education, and that the endeavor to provide for a national university at the seat of government was not only made in that convention but fostered by the six successive presidents of the United States? Washington led the way in his messages, and by a bequest in his will. In this Jefferson held hands with Washington. Jefferson's epitaph put as the climax of his life "founder of the University of Virginia."

The educational epoch of the Revolution was, as usual, in conjunction with the political, and introduced the era of the founding of state universities as well as of many endowed colleges. In a high sense the most original American contribution to the educational history of the world has been the rise and progress of state universities, inspired by their Magna Charta in the Ordinance of 1787 in the words "Religion, Morality, and Knowledge, being necessary to good government, and the happiness of mankind, schools and the means of education shall forever be encouraged." The original Federal land grants made possible the state school systems, crowned by the state universities.

[1] C. F. Thwing, *Higher Education in America*, pp. 172 ff.

The epoch of the civil war that added political equality to the liberty of '76 witnessed another conjunction of an educational epoch with a civil. The Federal land grants to state universities and common schools had prepared the way for the second greatest era in American education—the industrial. In 1862, when Abraham Lincoln signed the Morrill Act inaugurating land grants, from which have sprung sixty-five colleges of agriculture and mechanic arts in every state and territory, he became Lincoln the Educator as great as the Emancipator. Washington and Lincoln teach that eternal education is the price of liberty and equality in the new nation Washington dreamed of and Lincoln died for. The new *Nation*, nursed by John Marshall, came to self-consciousness in the adolescent pains of the war for the Union.

Ours is the glory of the third great political and educational epoch, and of the Spanish-American War. The cry "Cuba Libre" was not raised for conquest, but to free suffering brothers from cruelty. It brought in the era of fraternity between North and South. They were reunited in their unselfish devotion to mere human brotherhood, a cause of war unknown before in the history of nations. With the appearance of Uncle Sam as a big brother among the nations known as "world-powers," begins the realization of the ideal of the brotherhood of nations. The new nation is of necessity involved in international relations which naturally tend to breed a new nationalism at home.

As educators we can safely leave the problems of new nationalism to time and the statesmen. We will deal with what is unquestionably here—the New America. It is, first, the hemispheric America. The Pan-American union of twenty-one republics is a potent fact, as its commercial conference of the last week shows. It only remains that the proposed trade reciprocity agreement with Canada should draw British North America (in the extreme terms of Mr. Chamberlain) "from the imperial orbit into the vortex of [American] continental politics, and the interests of the United States." With the Panama Canal completed, and the reciprocity and continental policies of President Taft, inspired by the fragrance of McKinley's memory, carried out without entangling political alliances in the bonds of peace and trade, there will be a commercial confederacy of republics and peoples from Cape Horn to Peary's pole. This is indeed our New America, bounded on the north by the Aurora Borealis.

Beckoned on by the fraternalism of all the American peoples the New America far transcends the trite title of "world-power," for leadership in bringing the fulfillment of Tennyson's vision of "the federation of the world." It stands for international fraternity on the sure foundation of the fatherhood of God and the brotherhood of man. This is the New America, whose vision and voice our southern poet, Sidney Lanier, saw and heard in the Centennial Meditation of Columbia in 1876:

Now Praise to God's oft-granted grace,
Now Praise to Man's undaunted face,
Despite the land, despite the sea,
I was; I am; and I shall be—
How long, Good Angel, O how long?
Sing me from Heaven a man's own song!

Long as thine Art shall love true love,
Long as thy Science truth shall know,
Long as thine Eagle harms no Dove,
Long as thy Law by law shall grow,
Long as thy God is God above,
Thy brother every man below,
So long, dear Land of all my love,
Thy name shall shine, thy fame shall glow![1]

The era of the Prince of Peace will come, tho Army and Navy remain for police powers and to execute the decrees of the permanent high court of international justice. This day is heralded not only from The Hague, but also by the hand-clasp of the Kaiser, war-lord of Germany, with our peace-war-lord, hero of San Juan hill, dictator of the peace of Portsmouth, and holder of the Nobel peace prize. He is the apostle who has preached the gospel of our New America in Europe, Asia, and Africa. He is the third person in the trinity of world-wide known Americans—Washington and the epoch of liberty, Lincoln and the epoch of equality, Roosevelt and the epoch of fraternity!

The corresponding educational epochs and successive eras have been associated with central persons. Washington is the first, the father of the idea of a national university and national education, from which proceeded the era of the establishment of state universities and common schools by national land grants, and the multiplication of colleges by church and private endowment. Lincoln is the second, the reviver of Federal land grants, specifically applied to colleges of agriculture and mechanic arts, from which has proceeded the era of industrial education, and that of the differentiation of universities as contradistinguished from colleges. Roosevelt is the third, the reformer, preacher, and the teacher by tongue and pen of political, economic, and social doctrines in a complex and in what some consider a chaotic, but, we believe, a culminating, educational epoch, to be succeeded by an era of social education, with national and world standards, correlating and unifying all social forces.

The responsibilities of our educational epoch are stupendous, if we are to meet the demands of the New America. Impressed by the very magnitude of the figures summing up our work we become overconfident and grandiloquent. A standard journal, remarking upon the United States as the international schoolmaster, tells of the attendance of a hundred thousand school children in Porto Rico, and of a million and a half in the Philippines, and enlarging upon the influence of American teachers and

[1] *The Poems of Sidney Lanier*, p. 256 (Scribner).

schools in the Orient and even Europe, entitles the article "The United States Teacher for the Universe." We have almost the disposition to annex the new world in making revealed by the Mt. Wilson telescope and photographed in a swirling mass of gases, five hundred billion miles in diameter. We exult that the photograph shows a spiral nebula, apparently disproving the hypothesis of the Frenchman, La Place, and substantiating the American hypothesis of Professor Chamberlain, of the University of Chicago. American schoolmastering is counted almost powerful and practical enough to guide and teach the Creator the most approved methods of making a new world.

The epoch indeed has colossal statistics. The total attendance of pupils has increased from seventeen millions plus at the beginning of the decade to nineteen millions. The teaching force has increased to 495,463, a gain of 14 per cent as against 9⅝ per cent gain in the number of enrolled pupils. The average monthly wages have increased for men from $47.55 to $62.35, for women from $39.17 to $51.61. The actual increase in salaries is greater, as the average length of the school term has been extended from 143.7 days to 154.1 days. The angelic quality of the teachers has continued to increase, as there were only 104,495 men in the service, or 21 per cent of the entire force, as against 29 per cent in 1900.[1] Of course, our pride must hasten to add, "No other country in the world provides at public expense for the instruction of so large a proportion of the population." The expense is impressive—three hundred and eighty millions of dollars, equivalent to $31 for every pupil in average attendance. Most encouraging is the high enthusiasm for education in the South, and its progress in this decade in the education of the negroes. It is estimated that the statistics for 1910 will show an increase in the current expenditure for public education in the southern states of 150 per cent since 1900, and in the value of school property a gain of 200 per cent.[2]

The problem of the education of the negro is a matter of such grave national, as well as state, concern, as to demonstrate that in some form we must have national education or aid for it. Only less acute is the need for further national aid for industrial education, inclusive of agricultural education. President James's plea for National aid to elementary education deserves attention. The New America plainly demands the continuation and the enlargement of the national policy of forever encouraging schools and the means of education by Federal aid. "Education is not a good thing to be encouraged by government but a vital thing to be provided by it."

Let us lay aside all prejudices arising from the discussion concerning New Nationalism. This is the old nationalism unfolded. It is not necessary to disturb the state as the educational unit in America. It is well to discourage, and to defeat the blanket legislation that does not recognize

[1] *American Year Book*, 1910, p. 778 (Appleton). [2] *Ibid*, p. 786.

the diversity of conditions in the states of the Union, and attempts specifically to put the directing hand of the nation into the expenditure of the grant, as has been done in the Davis, and the reshaped Dolliver Bill for agricultural and industrial education. Generous as are the purposes of this bill, it would lead into temptations, waste, and inefficiency. But the general principle and purpose of Federal aid is to be strengthened, and pursued as consistently as we pursue expenditures for equipping the National Guard in the states, and as we co-operate with the states in geological surveys and other enterprises of common interest to the nation and the state.

That this historic policy of national aid may be wisely pursued we must cease our pettifogging and niggardliness with reference to plans for the extension of the United States Bureau of Education. When some of our strongest Congressmen have been successful in scaling in this Congress to a paltry $9,000 the $75,000 appropriation asked by the Commissioner of Education for a field force of consulting specialists in ten branches of education, estimates approved by the letters and petitions of over sixteen hundred persons and the strongest educational organizations, it shows the need of *educating* Congressmen. They are without the vision of the New America. With zeal for the conservation of natural resources and patriotically responding with abundant appropriations to the tune of "The Army and Navy Forever" they forget the perils of ignorance in a republic. They have not learned the axiom of a Rosebery: "In the last resolve, the efficiency of a nation rests in its education," nor have they heeded Washington in his farewell address: "Promote then as an object of primary importance institutions for the diffusion of knowledge." It is the hand of Washington, but the voice of Jefferson, that adds, "It is essential that public opinion should be enlightened." With the new life in this bureau under the able leadership of its distinguished commissioner, it is only necessary that we educational Rip Van Winkles wake to his support and a recognition of the fact that education is a branch of government as important as the Weather Bureau, the Department of Agriculture, or of Labor and Commerce, and indeed their indispensable ally.

The New America witnessing, as the acme of the celebration of the Mexican Centennial, the founding of a great national university on the 16th of last September, and the United States developing a university of the Philippines, must hasten the day of the founding by the gathering of the elements, the *disjecta membra*, of a national university at Washington. There must be the crown of the historic endowed American universities, and the point of co-ordination of the state universities in graduate work and research. The Smithsonian and the enlarging Carnegie Institution are the magnets of private munificence, which should attract the full benefits of governmental privileges and support.

The so-called ambitious, and to some affrightening, proposition for "the reorganization of American education" is a note of this decade.

The industrial era to which we have referred, culminating in this epoch, has driven us to this startling study. The report of the committee on the place of industries in public education to the National Council of Education furthers this movement. Despite diverse opinions, the desirability of having the elementary school terminate with the sixth grade is pretty generally recognized. The persistent suggestions of the universities to have the first two years of college, grades thirteen and fourteen, considered as parts of the disciplinary, or high-school education; grouping grades eleven and twelve of the high school with grades thirteen and fourteen gives an opportunity for subdividing the grades from seven to fourteen into two stages of four years each. Mr. George A. Merrill, principal of the School of Mechanic Arts at San Francisco, proposes

> an intermediate school, grades seven to ten, which would graduate boys at the age when so many of them drop out of the second year of the high schools, and hence such a school would be the logical place to develop "industrial intelligence" preliminary to an apprenticeship.[1]

He proposes a high school, or college, grades eleven to fourteen, where differentiation should begin. Some would-be trade schools, some classical schools, some pre-medical, some technical high schools, some commercial. His scheme is designed to save the boys who drop out of the school when the "industrial instinct" begins to manifest itself—in other words, at the end of the sixth grade. The above from the Pacific coast.

From the Atlantic coast the High-School Teachers Association of New York City sends out as a feeler a proposal for the organization of secondary education under the title *Articulation of High School and College.* They were surprised at the complacency with which their propositions for the most part were received. If President Eliot represents the Atlantic, he seems to be largely in harmony with the Pacific, when he says:

> I agree with you that the changes you advocate amount to a reorganization of secondary education: but the essence of the reorganization in my opinion will be differentiation among high schools, and greater range of selection among studies for pupils.[2]

The answer to President Eliot would be to reverse his statement, and have the differentiation among colleges instead of among high schools. This is in fact done in most of the state universities, and among others, where the university has many kinds of colleges and a wide-open elective system.

Mr. Charles F. Warner, in his minority report upon industrial education in the secondary school, looks in the same direction, when he says: "Furthermore, it is generally recognized that the open-at-the-top policy is a natural characteristic of American education."[3] If the brethren in the

[1] *Report* of the Committee of the National Education Association on the Place of Industries in Public Education, 1910, p. 105.

[2] *Articulation of High School and College—High School Teachers Association of New York City*, 1910, p. 20.

[3] *Report* of the Committee (National Education Association) on the Place of Industries in Public Education to the National Council of Education, July, 1910, p. 115.

East and the extreme West could realize how in the Middle West flexibility of entrance requirements has been attained with a well-nigh irreducible minimum of specified subjects, and with the organization of schools—technical and professional—and a wide range of electives in group systems in the colleges, they would see their acute problems of the articulation of high school and college largely solved. The complaint of the domination of the college is an inherited one with little ground left to stand upon. Now college and secondary school men sit together in shaping entrance requirements. It is becoming clear that no part of the educational system exists for itself. No more than one member of the body can say to another member, "I have no need for thee," can one part of a school system say to another, "I have no use for you." Many of the colleges, practically all of the universities, have been reorganized, and have courses that will continue courses in the secondary schools. Therefore, even if the high schools were to take the motto Mr. Green recommends, "fit for life first and for college incidentally," they will find that they have fitted for life and college. Surely, in this day of the acceptance of Herbart's doctrine of interest, and of the cultural value in socialized education of subjects pursued thoroly and psychologically, the high schools do not mean, by "fitting for life," merely to teach the trick of getting a living. They must impart the art of life and conduct in the sense that the intellectual life, the true life, is more than meat and raiment.

By the present flexibility of entrance requirements, and the articulation of the graded, the high schools, the colleges, and universities in the Middle West the way is open for a reasonable and established reorganization in education.

The strong tendency for the unification of all educational forces is in harmony with the times and will counteract the movements to extreme differentiation of various types of schools, and preserve the unity of the school system. The evolution of an almost model system of education is to be found in the Department of Education of the state of New York, with complete administrative freedom for the commissioner. A somewhat similar development of the educational commission in Massachusetts, correcting the error of setting up a separate system for industrial education, the establishment of educational commissions in some fifteen other states encourage the belief that such systems of education will be freed from political entanglements, that tenure of office will be secured for professors and teachers, and that the state systems will continue as the vigorous units in the greater unity of the on-coming nationalism in education.

Our educational epoch is second only to its manifestation of the American "passion for education" in its "passion for societies." Not less than thirty national, most of them called American, societies, having to do in one way or another with education, have been formed within the decade with a membership of above ninety thousand. These all are steadying

the ark of education, and carrying it forward. They stand ready, after the old Anglo-Saxon fashion, by voluntary enthusiasm and enterprise to counteract adverse political influences and the deadening tendencies inherent in the routine activities of the profession of teaching. In their range they cover the entire field of science, pure and applied, of the professions, of the arts, of the humane activities, beginning with eugenics and the protection of the child, and not even ending in art and archaeology, but extending on toward the infinite in associations like that of Religious Education. Few of us are familiar with the activities of these handmaids of education. For example, how many are aware that the most important event in the art life of the United States occurred last May at Washington in the First National Convention of the American Federation of Arts, with the representatives present of one hundred and three chapters and fifty thousand persons?[1] Have we kept up with the development of museums of all kinds, no longer considered as "storage warehouses"? Have we begun to know that this is an age of libraries, not simply housed in the Carnegie palaces, but circulating in the schools and traveling to the farthest rural district with thirty-four state library commissions? We rejoice in the great movement that has given us above four thousand consolidated school districts of all kinds. The traveling libraries, however, are consolidating our entire communities, with a common library, and hastening the day of the social center in schoolhouse as well as country church. Aided by the educational and public press, and the bulletins of agricultural and university extension, our whole people in fact today are becoming a republic of learners. University and school extension supplement the continuation schools, so well begun in the cities. Education is now perpetual and universal.

This diffusion of knowledge in the eyes of some means diffuseness, superficiality, and brings out the objection "a little learning is a dangerous thing." Our epoch meets this with an earnest effort to raise standards. The standardization of education is a present watchword in every kind of school, college, university, and profession, including the veterinarian. Some are frightened, fearing dead uniformity and mechanical results, or that there will be an institutional tyranny that will crush individualism. These are real dangers which, however, will never prevail in a society as keenly alive to education as ours in this epoch and as diverse in character with the different types of education and with the states as the primal educational unit. Where educators do not respond to the standardizing processes, standards are being forced upon them, forged by the evident inconveniences and commercial waste for schools and students, and compelled by the requirements of the professions that deal with life and property. The legislatures are driven to enact standards into laws to protect the people. The prevalent greed and graft have worked as subtly and

[1] *Appleton's Year Book*, 1910, p. 737.

widely in education as elsewhere. The idealism of the American and the marvelous prosperity in certain centers have lifted up standards worthy of imitation. We are, therefore, rapidly approximating national standards, and world-standards, befitting the new nationalism of our New America. They are as convenient and educative as a national bank currency in the world of finance. Who does not know the meaning of fifteen secondary school units? Of sixty collegiate year-hours, with the qualitative definitions given to units by associations of college and secondary-school men, and instrumentalities like the College Entrance Examination Board and the National Conference Committee on Standards of Colleges and Secondary Schools? The conferences of the chief state school officers of great sections of the country, of state examining and licensing boards, and of the professions are endorsing these standards, and waiting upon us school men for the perfecting of them.

Last and not least, this has been the epoch of private munificence, in extent rivaling the bounty of the state. The old and new endowed institutions are enabled to be as national in spirit as the state institutions, and the two types safeguard academic freedom, and give a variety and glory to our patriotism. The most original development is the establishment of great foundations like the General Education Board, the Carnegie Institution for Research, the Carnegie Foundation for the Advancement of Teaching, the Russell Sage Foundation, the proposed Rockefeller Foundation, worthy in wealth and purpose of our New America, and reassuring in this commercial age that our educational epoch is the beginning of an era of a republic of research, of letters, learning, labor, and humanity, broadening and making perpetual the republic politic of Washington, Lincoln, and Roosevelt. Thus may the New America be perpetuated, the "Messiah of the Nations" of Riley's song:

High o'erlooking sea and land,
America!
Trustfully with outheld hand,
America!
Thou dost welcome all in quest
Of thy freedom, peace and rest—
Every exile is thy guest—
America! America!

Thine a universal love,
America!
Thine the cross and crown thereof,
America!
Aid us, then, to sing thy worth;
God hath builded from thy birth,
The first Nation of the Earth—
America! America!

TOPIC: THE COMING OF THE HUMANE ELEMENT IN EDUCATION

A. THE OPEN-AIR SCHOOL

SHERMAN C. KINGSLEY, GENERAL SUPERINTENDENT, UNITED CHARITIES OF CHICAGO, CHICAGO, ILL.

The children of the United States spend 1,476,744 years in the schoolroom each twelve months. To this should be added the time spent by dull and backward pupils kept in at recess and after school, because they did not get their lessons or for bad conduct. No one has attempted to compute the loss in efficiency, school progress, and health of this vast army of children because of overheated, foul air prevalent in the schoolroom, and no one knows to what extent stupidity and bad conduct are attributable to the same cause.

Certain pressures for results prevalent in the business world do not operate in the schools. Unlike the factory or mercantile house, the schools have no anxiety about obtaining raw material. Each year finds a roomful of children waiting at every grade. The school likewise has no problem of advertising or salesmanship in marketing its product, for each year the opposite door opens and an equal number dissolves back into the general public. The community giveth. The community taketh away.

Go back to the school of your childhood. The room is full of children of the same age as you and your fellows when you were there. It is as tho the world stood still and did not grow up. A never-ending stream of children is ready to the teacher's hand. She has her chance as this ceaseless procession makes its pause in her room and goes on during the brief years of school life and out into the world.

The general subject of the morning, "The Coming of the Humane Element in Education," interests me greatly. It is a most significant topic. The word "coming" rather than "arrival" or "arrived" was doubtless used advisedly. All will gladly concede that the "humane element" has a legitimate place in a system which deals with 19,000,000 children in a single year.

For this vast army resolves itself into individual units. Each wears clothes, lives at a certain address, possesses the possibility of getting wet feet and catching cold, knows whether and why he likes or dislikes his teacher. Let me select one from this number and tell you a word about her. In this way, you will understand why I, an outsider, am interested in this subject and why I have been asked to take part in this meeting of superintendents.

On the first Monday of September two years ago, Julia was one of forty-five children to be gotten over certain intellectual ground before the end of the school year by a teacher in the second grade. Most of the children got the pace and made progress, but Julia, for some unaccountable

reason, lagged behind. The teacher, desiring to bring all her group under the wire inside the time limit, like all teachers who are judged by their ability to chase their brood toward that college somewhere, finally became conscious of Julia as an individual problem. She saw a very ordinary little girl, ten years old, pale, listless, but not markedly different from the other children except for this unaccountable "stupidity." She wondered why a child, older than the rest, always quiet and attentive, could not keep up. One afternoon she got her clue when she heard a little boy shrilly whisper: "Hello there, 'Con Kid,'" and saw Julia shrink back into her seat as if someone had struck her.

In May, Julia's father had died of consumption. Until two months before his death, the child slept with him. When she began to cough and run an afternoon temperature, the tuberculosis nurse found a back porch roof on which Julia's cot could be placed, and coaxed her to sleep there. It was not a secluded spot. When one's mother is trying to bring up four children decently on nine dollars a week, one does not live in the suburbs. Many curious windows looked down on the little cot, and the children of the neighborhood, with innocent but exquisite cruelty, twitted and taunted the sensitive "con kid" until she refused to sleep on the roof, and begged her mother to move to some place where no one would know about her. But education is compulsory, so she sat, five hours a day, with the other second-graders in the stuffy schoolroom, running a temperature every afternoon and trying hard to get lessons in which she always failed.

Fortunately for Julia, the teacher read the papers, and she remembered that a school for such children, founded in loving remembrance of a child who died, was soon to be opened on a roof near Julia's home. She took the child there, and Julia discovered that she was not the only "con kid" in Chicago. That helped. The open-air life and the good food helped too; so did the Eskimo suits, and presently Julia began to learn. She gained ten pounds, made her grade, and, most important of all, she forgot all about being different from other children and enjoyed herself. Today, a picture of the "con kid," rosy-cheeked, bright-eyed, and fairly radiating vitality, is going all over the country to help other children, well and sick, to win their fresh-air rights.

Three years ago, there was not a single place in this country where such a child could obtain medical care and schooling. The school that received Julia was Elizabeth McCormick Open-Air School No. 1, conducted by the United Charities of Chicago and the Board of Education; in which all expense of food, clothing, and equipment was met by a grant from the Elizabeth McCormick Memorial Fund Trustees.

Julia's story helped to jar us awake not only to her situation and that of her mother but to thousands of boys and girls in the city in a like condition.

We came upon these children in other ways. The United Charities of

Chicago carries on an extensive outing work. Medical inspection of the children often eliminates from the joys of a vacation in the country children who are predisposed to tuberculosis, who are running temperatures, and whose physical condition is such that they cannot safely romp and play with other children. Furthermore, our work calls us into homes where tuberculosis has laid low the supporter of the family. Chicago is still losing 4,000 people a year from tuberculosis. Our Tuberculosis Institute has found that from 25 per cent to 30 per cent of the children in such families are infected. The heaviest toll laid upon the resources of the United Charities of Chicago by any one cause is that occasioned by tuberculosis.

We know the three-room home, the family trying to live on six dollars a week. We see the children as babes, as little boys and girls; later, we deal with the same boys and girls who come out of school and try to find employment. We witness their disappointment when they fail because of health. We deal with grown people, failures because they have not the physique to stand up and take their place in the world. We see the finished dependent become chargeable for life upon the community because of failure of health or moral delinquency that arises thru inability to earn. We realize that it is hopeless to deal with trouble after it happens; that prevention is necessary; that it must be brought about thru education and the spread of right knowledge of living; that the hope is with the children of the country.

Professor Irving Fisher states that there are 138,000 deaths in a year in this country from tuberculosis, and estimates that unless something is done, of people now living 5,000,000 are destined to die from this preventable disease. It levies its greatest toll between the ages of twenty and thirty years. Saying nothing about affection, human values, and happiness, Professor Fisher states that the money loss alone is $1,100,000,000 a year. Another authority has recently shown that in the state of Illinois alone $1,187,000 a year has been spent in the work of educating children who died before reaching their twentieth year.

The discovery of health needs has come from another angle and almost simultaneously. Medical inspection of schools began in Brussels in 1904, and is now national in scope in England, France, Belgium, Sweden, Switzerland, Bulgaria, Japan, the Argentine Republic, and practically so in Germany. In the United States, Boston began in 1894. Now all Massachusetts towns and cities and seventy cities in this country outside of that state have medical inspection. The data are not very accurate, but it is the universal experience that physical defects are found in a large percentage of the children. We are now speaking of all kinds of defects—not tuberculosis only. In Minneapolis, in 1908, 65 per cent of the children examined were found defective; in New York, in 1906, 71 per cent. As a rule this inspection is yet crude, and only the more patent defects are

discovered, because the examinations are not detailed or thoro; however, imperfect as is this machinery of discovery, it is much more complete than that for remedying defects when discovered. For instance, in Cleveland in 1907, only 22 per cent of the defective children discovered secured attention and correction; in New York, 25 per cent; in Somerville, Mass., 15 per cent. This seems to indicate need of further interest and action by both teachers and the general public. It is of little value to know that 100 children have defects if only 25 receive treatment. It has not profited the other 75 much that somebody knows there is something the matter.

The particular form of relief which we are discussing this morning is that of anaemic children, those predisposed to tuberculosis. In Sweden there have been some very careful investigations. In Stockholm, this thoro work revealed the fact that 1.61 per cent of all the children under 15 showed pronounced tubercular infection. If this percentage were applied to the United States, and it is believed by many authorities to be a conservative estimate of children similarly affected in this country, it would mean that we have 230,000 such children.

It is commonly agreed that the usual school régime is not adapted to the needs of children of such pronounced physical handicap. The open-air schools that receive these children are essentially ungraded schools, and perhaps 25 would be the right number for each room or teacher. If this were the case, there ought to be in the United States 9,200 such schools instead of 27 as there are at present. It would mean 85 in the city of Chicago instead of two.

What then is the open-air school? How did it come about? Charlottenburg, a suburb of Berlin, led the way. With German thoroness, their people discovered the needs of these children first. They were also first in the field with sanatorium and scientific treatment. They discovered two things:

1. That the ordinary school régime did positive physical injury to such children.

2. That if they sent them to the sanatorium, while they improved in health, they lost their chance for an education or fell behind; hence the Wald Schule was the happy middle ground.

They took a group of anaemic children predisposed to tuberculosis to an open-air school in a forest near by, and the thrilling results started a chain of schools around the world.

In the open-air school, the health of the child is made first consideration, and the school work fits in according as physical needs will warrant. There is much more freedom and informality in such schools than in the usual school. Medical inspection, weighing, taking of temperatures, care and supervision by a nurse, knowledge of home conditions form an important part. Usually the day is something as follows:

Arrive at school, temperature taken, and inspection by nurse, 8:00 to 8:30.
Bath followed by lunch, 8:30 to 9:00.

In school, 9:00 to 10:15.
Recess, 10:15 to 10:30.
In school, 10:30 to 11:45.
Preparation for dinner, and dinner, 11:45 to 12:45.
Period of rest of one section of the school alternating with the second section which goes through the same régime, 12:45 to 3:15.
Then play, gymnastics, temperature, and lunch, return home and to bed at eight o'clock.

The school régime includes not only the medical inspection but care and attention of the nurse all the time and careful and thoro knowledge of the home conditions of each child and a conscious, definite effort made thru the doctor, the nurse, and the social worker if need be to reach the home conditions and render them suitable to the needs of the child. This means diet, ventilation of sleeping-rooms, cleanly habits, good cooking, and all the rest. It often meant putting relief in the home, because the home conditions of most of the 49 children who came to the Elizabeth McCormick Open-Air School was such that it needed not only the advice and help of the nurse but often relief from charitable agencies.

In the distinctly open-air school as conducted in this country, children of pronounced predisposition or infection are selected. In the New York and Boston open-air schools, cases of open tuberculosis are admitted. These schools have been conducted in all kinds of places—schoolrooms, roofs, ferryboats, balconies, tents, unused school buildings, dwelling-houses, municipal bath buildings, park refectories, and specially designed rooms.

Growing out of the experiments with these children who showed tuberculous infection, the open-window room with its particular régime is evolving. These rooms are designed for anaemic children and those with less pronounced physical difficulties.

The expense in the open-air schools incurred on account of food, clothing, special attendants, and usually the building is borne by some private agency. The average cost for such schools, exclusive of the original equipment, is from twenty to twenty-five cents per school day per child. In the open-window rooms any extra expense for food, clothing, attendants, cost of special equipment is also borne by some private agency. The school board, I think, in every instance has supplied the teacher and all school equipment and supervision.

The régime for the open-window room, at least in Chicago, has not been fully standardized as yet, but I think that all will agree that there should be careful medical inspection in selecting the children, that they should be weighed periodically, temperatures taken, home conditions known and made suitable if possible, and that the services of a nurse or attendant to supplement the teacher's work by taking care of feeding, wrapping the children up when they are lying down, helping to remove wet clothing, etc., should be a part of the scheme. Chicago is planning

also to have three or four rooms where it is hoped that the only addition to the usual school régime will be more careful and detailed medical supervision. These will probably be known as low-temperature rooms, but it it is to be distinctly understood that low temperature in this sense is synonymous with fresh air. No one wants to make the mistake of assuming that cold air is necessarily fresh air. The great point to be achieved in all this work is that the whole 19,000,000 children should get their share of the fresh air of which the Good Lord has made plenty for all. If they are educated to the right feeling for fresh air and for health needs and health rights, the problems of smoke nuisance, bad air in theaters, churches, street cars, and trains will be on the high road to solution. It only needs the right attitude on the part of the public to obtain its rights in this respect, for the fresh air is present everywhere, only waiting to be let in, and certainly the intelligence of the American people will find a way.

Now as to the results. The universal testimony is that the children gain in weight, that temperatures are reduced, that listless children become alert and attentive, and that there is a marked change in the mental grasp. In the Elizabeth McCormick Open-Air School, there was an average gain of something over four pounds. Altho there was one-third less time spent on the school work, no child failed to make his grade, three of them made two grades, and one made three.

What do the teachers think about this work? Here are testimonials from those who have been engaged in this work in places scattered all over the country.

TESTIMONY OF TEACHERS WHO HAVE TRIED THE WORK

"I would not care to return to the closed room. My pleasure in my work makes me wish that for the sake of the teacher as well as the pupil every room might be an open-air room."—Marie E. Powers, teacher in the Providence Open-Air School.

"As I am an arrested case of tuberculosis, I could never have stood work in any place but an open-air school. I never wish to go back to the usual poorly ventilated school building."—H. L. Birdsall, teacher in the Brooklyn Open-Air School.

"For a score or more years my experience as a teacher has been gained in the public schools of this country, in good old New England, California, and the Middle West. Our teachers today are victims of nervousness, irritability, and so-called overwork. Those who have tried the outdoor work have been capable of more prolonged labor with far less fatigue. This is my own experience and nearly all teachers who have given it a fair trial feel that there is no place for them like the open-air school."—Helen M. Mead, formerly teacher in Franklin Park School, Boston.

"The work is heavier in an open-air class, but I feel much more able to accomplish it. After a day's work I now return home fresh and do not suffer from the usual headache and dryness of throat that follow teaching in the ordinary room."—Katherine Nolan, teacher in open-air room, Public School No. 21, New York City.

"My color has improved and my weight increased. At 3:15 I do not feel the fatigue I formerly felt at 10:30. I am comfortable in a lower temperature than before. Trifles which had assumed the proportions of mountains affect me less."—Effie Hoerner, teacher in open-window room, Graham School, Chicago.

"Fresh air has done wonders for me. I am strong and fat and have gained ten pounds

since last year in spite of seven weeks' work in the summer. My complexion has undergone a complete change. Instead of being a sallow, dead, dry-skinned person, my skin is fresh, full of life and rosy."—Henriette Roos, teacher in open-window room, Graham School, Chicago.

"I have never in my life been so free from backache and extreme fatigue as I have been since I took the open-air school. 'How do you keep so fresh?' asked another teacher last night. 'I am always nervously exhausted after a dark, rainy day like this.' I told her, truthfully, that I had ceased to dread such days. Not even rain can dispel the sunshine in the open-air school."—Anna Bunker, teacher in the Elizabeth McCormick Open-Air School, Chicago.

Boston has already voted to have at least one room in each new school building constructed with the intention of being used for open-air work. New York has remodeled rooms in several buildings so that roofs can be utilized and windows opened clear out. A school principal in San Diego, Cal., writes:

My building here in this city is so crowded that the board are talking of erecting a new building. I am trying to persuade the superintendent to give me a thoroughly typical southern California schoolhouse, all on the ground floor, if need be, with one side of the room so constructed of glass folding doors that the entire side can be thrown open to the air. There are not more than ten or a dozen days during our school year when we could not have that side open.

The Elizabeth McCormick School was started and maintained by a fund given in memory of a most unusual child. In her few brief years, she had given indication of a life of altruism and great usefulness. A child herself, her interest was peculiarly in children, in surrounding their lives with possibilities of happiness. Thru this fund in her memory was discovered Julia, the little girl whose picture graces the cover of the book, *Open-Air Crusaders*. Both of these children have had a part in carrying this message—one who gave, and one who, in receiving, also gave.

B. THE TRAINING OF THE MENTALLY AND PHYSICALLY UNFORTUNATE

LEONARD P. AYRES, RUSSELL SAGE FOUNDATION, NEW YORK CITY

DEVELOPMENTS OF THE PAST DECADE

Eleven years ago the school superintendents of America, assembled in convention in Chicago, discussed the problems then foremost in educational thought and action. Diligent search thru the printed report of that meeting discloses no single mention of child health, no word about school hygiene, no address devoted to the conservation or development of the physical vigor of youth.

At that time eight cities in America had systems of medical inspection in their public schools. Today the number of such systems is over four hundred. This development is without parallel in the history of education.

No one there present had ever heard of a school nurse, for no city in the world employed one. But today seventy-six American cities have corps of school nurses as permanent parts of their educational forces. Had anyone in that Chicago meeting dared prophesy that we should soon employ dentists to care for the teeth of our school children, his words would have been greeted with derision; but today forty-eight cities employ staffs of school dentists.

Ten years ago those who discussed the problems of educating the mentally deficient, the blind, the crippled, and the deaf thought and talked only from the standpoint of treatment in special institutions. But today New York City alone has in her public schools one hundred and ten classes for mentally deficient children, with ever-increasing provision for the other classes of unfortunates, and the work there is merely a sample of what is going on in the cities thruout our land.

These changes represent no passing fad or temporary whim. They are permanent, significant, and fundamental. They mean that a transformation has taken place in what we think, as well as in what we do in education. They mean that the American common school has ceased to be merely a place where for a few brief years our children shall acquire useful information. Instead, it has entered upon a new rôle, in which it is destined to reach and to reach profoundly the whole of every child. These changes mean that in ever-increasing measure our schools are to reach the exceptional child as well as the normal and are to make provision for his physical well-being as well as for his intellectual development.

This profound change in our educational practice did not come thru the slow processes of philosophy, nor because we were awakened by the stirring words of voice or pen of any educational prophet. No school men can claim great credit for having hastened its advent. It was forced upon us, first by the natural results of compulsory education and still more definitely and directly by three of the strangest allies that ever contributed to the work of social reform.

THE FIRST REFORMER—THE CONTAGIOUS DISEASES OF CHILDHOOD

The first of these three reformers was the contagious diseases of childhood. When Boston began medical inspection in America in 1894 by dividing her schools into fifty districts and placing a doctor in charge of each district, she did so in the hope that the new measure would curb the waves of contagious disease that repeatedly swept thru the ranks of the children, leaving behind a record of suffering and death. The experiment was successful and when the other cities learned how Boston was solving the problem, they too began to employ school physicians and to organize systems of medical inspection.

During the first years the spread of the movement was slow, only one or two cities taking it up each year. Then these pioneers were followed

by dozens of their sister cities, then by scores, and in the past few years by hundreds.

This sudden recognition of the imperative necessity for safeguarding the physical welfare of our children grew out of the discovery that compulsory education under modern city conditions meant compulsory disease.

The state, to provide for its own protection, has decreed that all children must attend school, and has put in motion the all-powerful but indiscriminating agency of compulsory education which gathers in the rich and the poor, the bright and the dull, the healthy and the sick.

The object was to insure that these children should have sound minds. One of the unforeseen results was to insure that they should have unsound bodies. Medical inspection was the device created to remedy this condition. Its object was prevention and cure. But it was destined to have far greater influence than its early sponsors dreamed.

When school men watched the doctors discover and send home children suffering from contagious disease they asked whence those diseases came. They examined their records of absences and they discovered that in nearly every city the number of cases of contagion among children leaps up each year when the cold weather approaches and the children return to school to sit quiet in close contact with their fellows, to drink with them from the same cup, and breathe dust-laden and artificially dried air. And when spring returns and the windows are again opened and schools are closed for the summer, those who are left go forth to be comparatively free from disease until the return of the next school year.

School men pondered these facts well and now in city after city schoolhouses are being constructed in which the paramount object is to have the rooms so clean, the drinking-water so pure, the air so fresh, and the sunlight so plentiful that compulsory education shall no longer spell compulsory disease but rather compulsory health.

The sanitary drinking-fountain and the individual cup are fast driving out the common and dangerous tin dipper. Sixty-nine cities already clean their schools with vacuum cleaners and the days of the broom and the feather duster are numbered. We are nearing the day when our schools will be as clean as hospitals and for the same reasons.

Nor is it only within the four walls of the school building that provision is steadily being made for conserving health and developing vitality. The only educational movement that ever approached medical inspection in the rapidity of its development is the playground. Almost unknown ten years ago, it is now becoming as much a part of the modern school as the roof or the walls.

The movement for public-school athletic leagues is spreading from city to city and carrying with it the knowledge of how to give every boy and girl the physical advantages thru exercise that were formerly reserved for those already so well endowed that they did not need them.

The child with contagious disease has done well and thoroly his work of educational reform. The health movement in our public schools has been transformed during the past decade from a merely negative movement having as an object the avoidance of disease to a splendidly positive movement having as its aim the development of vitality.

THE SECOND REFORMER—THE BACKWARD CHILD

The second of the strange allies that came to help us reshape our educational doctrines and practice was the mentally deficient child. We discovered that the dragnet of compulsory education was bringing into our schools hundreds of children who were unable to keep step with their companions, and because this interfered with the ordinary administration of our school systems we began to ask why these children were backward.

The school doctors helped us find the answer when they told us that hundreds of these children were backward purely and simply because of removable physical defects. And then we took the next great forward step for we came to realize that children are not dullards thru the will of an inscrutable Providence, but rather thru the law of cause and effect.

This led to an extension of the scope of medical inspection to include the physical examination of school children, with the aim of discovering whether or not they were suffering from such defects as would handicap their educational progress and prevent them from receiving the fullest benefit of the free education furnished by the state.

This work was in its infancy five years ago, but today two hundred cities have systems of physical examinations of their school pupils.

Nor was this the only contribution of the backward child. Along with the knowledge of the importance of physical defects came the realization that compulsory education lays a deep obligation on the state as well as on the parent. If it is to insist that every child shall attend school, it must provide schools fitted to the needs of every child. It is in response to this realization that thruout the land the public schools are opening their doors and fitting their work to the peculiar needs of the blind, the deaf, the crippled, and the mentally defective. It is in response to this realization too that we are at last beginning to make special provision for that still more exceptional and vastly more important group made up of the children of special talent and even genius.

Just as the work begun with the object of excluding disease from the classroom has developed until it is now redounding to the benefit of all school children, so the special provisions devised for dealing with the backward child have developed and expanded until they now bid fair to benefit the children who are not backward.

Teachers, principals, and superintendents have watched the splendid work of the special classes in giving education to children who formerly were doomed to lives of uselessness to themselves and deep menace to the

community. And as they have seen the seeming miracles those classes perform, they are asking why the same measures of small classes, skilled teachers, play, manual work, and abridged courses of study should not give even greater results among normal children.

THE THIRD REFORMER—THE TUBERCULOUS CHILD

The last of the three allies in the work of educational reform was no other than the great white plague, tuberculosis. Four years ago the city of Providence started an open-air school for tuberculous children. During the following year two other cities followed her example. Two years ago five cities had open-air schools. Last year the number was eight and this year the new work is being done in twenty-eight cities.

In city after city across the country open-air schools have demonstrated their ability to take pale, wasted, and sickly children and convert them into strong, vigorous, and healthy children. And moreover they have proven their ability to teach these ailing children faster and better than the regular schools in the same cities can teach the strong and normal children.

And school men, reading the lesson so clearly taught, are asking why all children should not be allowed to breathe pure air. In answer to their question school architects and heating and ventilating engineers are discarding their traditional ideas of ventilation, and are even now constructing school buildings with the avowed object of bringing to every boy and girl the advantages heretofore reserved for the tuberculous.

KEEPING FOR THE STRONG THE BENEFITS DEVELOPED FOR THE WEAK

These three reformers—the child with contagious disease, the backward child, and the tuberculous child—have done their work well, and that work is not the mere provision for the needs of sick and exceptional children; it is the fundamental reshaping of our educational aim.

For nineteen centuries the educational world has held, as the most perfect expression of its philosophy, that half-line of Juvenal in which he pleads for the sound mind in the sound body. It has remained for the first decade of the twentieth century to awake to a startled realization that Juvenal was wrong—wrong because he bade us think that mind and body are separate and separately to be provided for.

Only now have we come to realize the error and to take steps to rectify it. Only in the last few years have we begun to see that educationally, at least, mind and body are inseparable, and that the sound mind and the sound body are inextricably related—both causes and both effects.

All these things mean that it is our splendid privilege to see and to be a part of a movement which is profoundly transforming our traditional ideas of education. They mean that our children and our children's children will be a better race of men and women than we are or were our fathers.

PUBLIC SCHOOL TRUE INSTRUMENT OF EUGENICS

In recent years there has appeared a new science calling itself eugenics, that seeks to discover the secrets of heredity and environment and to develop methods that shall insure for future generations greater strength, more vitality, and enhanced intellect. The aims of that new science are high and noble beyond those of almost any other form of human activity. But in their methods its advocates are wrong.

They are wrong when they seek to apply to the breeding of men the lore of the stock-breeder, because they overlook the deepest and most fundamental factors in man's nature.

What they are aiming at is the steady improvement of the human race, and that is coming. But it is coming thru the public school of the future; the school in which the physical, the mental, and the moral will be developed together and not separately, the school in which the child will not only live in healthful surroundings but in which he will learn habits of health which will be lifelong.

The human race will be a better race because of the lessons that have been taught us by the child having contagious disease, the backward child, and the tuberculous child. Because of these lessons, the youth of the future will attend a school in which health will be contagious instead of disease, in which the playground will be as important as the book, and where pure water, pure air, and abundant sunshine will be rights and not privileges. He will attend a school in which he will not have to be either truant or tuberculous or delinquent or defective to get the best and fullest measure of education.

C. THE PEACE MOVEMENT AND THE PUBLIC SCHOOLS

MRS. FANNIE FERN ANDREWS, BOSTON, MASS.

"Educational Achievement and Educational Endeavor at the Close of the First Decade of the Twentieth Century," the subject of discussion in this convention, can hardly receive complete consideration without taking cognizance of the peace movement, which may be said to have had its concrete inception in the first decade of the nineteenth century, and which, therefore, is just rounding out a century of significant development. The peace movement in its very nature is an educational movement, and the milestones of its progress must be recorded in any adequate survey of educational achievement. Moreover, the principles of this movement have, especially during the last decade, so impressed themselves upon the social, economic, and political life that their recognition must, from now on, form an integral part of the education of the people. Since the organization in 1815 of the New York Peace Society, the first organized effort for world-peace, the idea has gradually grown into conviction that

the prosperity of a nation is intricately connected with the life and growth of other nations. From this conception of interrelationship, the conclusion naturally follows that as civilized individuals no longer resort to the duel or the street fight in the settlement of their differences, so nations should have recourse not to fighting but to reason, not to armies and navies but to international courts. This spirit, which has come to be called the "new internationalism," is developing a new kind of citizenship which is demanding new responsibilities. It is, therefore, fitting that a body of educators take note of a force which is so vitally affecting the life for which the schools are preparing.

Recent international events have taken place so quietly and rapidly that their full significance is not generally understood. Unless one has followed the consecutive steps in the approach of the nations for an organized world, he cannot realize how direct and constructive this action has been. The First Hague Conference, which convened on the eighteenth of May, 1899, ushered in a new epoch in international politics, and changed the whole aspect of the peace movement. Until then the leaders in this world-philanthropy, altho they had always argued that international federation is the prerequisite for international peace, had made their forward advances chiefly in creating a sentiment against war by showing its injustices and its inconsistencies with economic, ethical, and humane principles. The First Hague Conference, by evolving a practical method of stopping international warfare, converted the peace movement into a practical science and pointed out a clear course for governmental action, which can in time bring about permanent peace among the nations. The rapidity with which this proceeds will depend entirely upon the demands of public opinion thruout the world.

It was a striking manifestation of the progress of public opinion in international matters that twenty-four nations responded to the invitation of the Czar of Russia to send delegates to a conference to discuss methods of stopping international warfare, a subject which before this first peace conference had been jealously held as a matter for each individual nation to settle. And it was none the less obedience to public opinion that prevented these one hundred representatives from coming to any concrete agreement concerning armaments. The adoption of new rules for alleviating the cruelties of war, and the signing of the convention, providing for the establishment of an international arbitration court to which nations in dispute may appeal, reflected the desire of the world at large to base international relationships on the law of reason rather than that of force. The importance of this court was well understood by those far-sighted statesmen at The Hague, and indeed it has well proved its worth, for since it was opened in April, 1901, eight important cases of international controversy, representing nearly every great nation of the earth, have been settled by its judges.

The results of the First Peace Conference are far greater than the world ever dreamed of. And perhaps the greatest result of all was the calling of a Second Peace Congress, which was held in 1907, and which included practically every nation of the world. One of the most important decisions agreed upon by this conference was the one concerning The Hague Court. This world-institution had shown its ability to settle any dispute that might arise between nations; but the Second Peace Conference made it doubly certain that disputes should be referred to this court. These statesmen decided that in case of a conflict between two powers, either of them might go to the court and ask to have the difference settled, no matter if the other were unwilling to have the case referred. This was indeed a great improvement over the rule made by the First Peace Conference, which compelled both nations to agree to submit their difference to the court before it could be tried.

This rule is greatly strengthened by the signing, since the First Hague Conference, of a hundred arbitration treaties, pledging reference of disputes to The Hague Court. Thirty-six nations have thus expressed their desire to use the court, while the United States is a party to twenty-five of these treaties. Most significant of all is the growing idea that all questions, including those of national honor, should be submitted to arbitration. The most significant utterance on this subject is that by President Taft, made in New York on March 22, 1910:

> I do not see any more reason why matters of national honor should not be referred to a court of arbitration than matters of property or matters of national proprietorship. . . . . I do not see why questions of honor may not be submitted to a tribunal supposed to be composed of men of honor, who understand questions of national honor.

Having then an international court of arbitration with its tested ability to try cases, and a reasonably satisfactory assurance that disputes will be there referred, the world can be relieved from the immediate fear of war, and can carry on its peaceful pursuits in science, industry, and education. Doubly certain is this contention when one interprets the action of the Second Peace Congress in dealing with the matter of a permanent International Court of Justice which shall be to the nations of the world what our Supreme Court is to the states of the United States. Everything was agreed upon which should make this court a reality except the method of selecting judges. It is probable, however, that the proposal by Secretary of State Knox to the government to transform the International Prize Court, which was provided for by the Second Peace Congress, into an International Court of Justice will be adopted, and the nations thereby will have evolved a world-institution which is the foundation of the judicial department of a world-government.

By its declaration in favor of periodic Hague Conferences, and the stipulation of a third conference to be held about the year 1915, the Second

Peace Congress has also laid the foundation for a parliament of the nations, the legislative complement of the International Court. That this third conference will develop and extend the constructive work of the two previous ones is assured, if in no other way, by the direct efforts for world-organization of the Interparliamentary Union, composed of three thousand members of the parliaments of the nations. This body, which initiated the call for the Second Hague Conference and was largely responsible for its program, is mapping out the next logical steps in the organization of the world with which the Third Peace Congress should deal. The international peace movement has indeed made great strides in the first decade of the twentieth century.

Side by side, however, with this world-movement for international federation, looms the mad rivalry among the nations in the equipments of warfare. There never was a time in the history of the world when so much money was spent on armaments. Certainly this is a contradiction to the remarkable advances made by the governments toward permanent international agreements. The situation is indeed paradoxical; but paradoxes are never enduring. The life of this particular one depends on the future growth of international legislative and judicial institutions which will make war preparations so apparently unnecessary that they will gradually diminish and finally disappear. Optimist as I am, however, and as one must be who interprets the meaning of modern history, I do not expect anything sudden in the breaking down of the war system. It is entirely a matter of state of mind, and this mode of thinking must be brought about thru education.

As the public schools have been the bulwark in creating standards of citizenship, so, I think, they have a close connection with the development of the new ideas which are changing the responsibilities of the citizen. New generations must carry into effect the constructive measures so auspiciously inaugurated. It was recognition of this function of the schools that led the French Minister of Public Instruction to prescribe the teaching of international arbitration, humanity, and brotherhood in the primary, secondary, and normal schools of France. The teachers of the United States who deal with the children of all the nations have a special opportunity to inculcate in the minds of the youth the spirit of the new internationalism which has certainly changed the economic and political status of our country.

In history, literature, and geography our teachers can point out the trend of thought which is bringing the whole world together into one family. On the eighteenth of May, the anniversary of the opening of the First Peace Congress at The Hague, the teacher has an opportunity of calling to mind the principles for which this day stands, principles which stimulate sentiments that make for international justice. On this day, a special review should be made of the principal forces leading up to the calling of

The Hague Conferences, of their work, the definite results so far accomplished, and the achievements yet hoped for. Thru such teaching, there will be developed that state of mind which, without criticizing the past, will be able to discern the heroic figures in the peaceful progress of the world, and give them their just and rightful place in the world's history.

The American School Peace League was organized to create this state of mind, and to this end it seeks the co-operation of the teachers of America. It comprises today representative educators from every state in the Union and has twenty duly organized state branches. The work of the League lies in three directions. First, it aims to acquaint the teachers of the country with the facts and principles of the new internationalism. It does this thru teachers' institutes, special teachers' meetings, and teachers' conventions; thru the educational press of the country; and thru the Publications Committee, which is circulating articles on internationalism directly applicable to the teachers' work.

On account of the special opportunities in teaching the history of our country—whose federation of states foreshadows the federation of nations; whose National Congress, the Congress of the world; whose Supreme Court, the permanent international court—a Committee on the Teaching of History was organized with Superintendent Wilbur F. Gordy, of Springfield, Mass., as the chairman. This committee compiled last year the results of a wide investigation of history examinations given to teachers in one case, and to pupils in the higher grammar grades in the other. The report states that "in some school systems much time is devoted to the study of (1) such useless details as unimportant dates and statistical matter; (2) the complex principles underlying the organization and evolution of political parties; and (3) battles and military campaigns."

The report further states that by far the greatest waste in history teaching results from the excessive and disproportionate amount of time which is spent in the study of wars. While, of course, wars should be studied and should receive much attention on account of the important part they have played in both racial and national evolution, they should not involve the teaching of the military minutiae of campaigns and battles. And finally, the committee says: "When we learn to keep in mind the right perspective in teaching the national biography of such a peace-loving people as we have been from the beginning of our history, we shall devote to the arts of peace and to the social and industrial conditions of life that large measure of attention which is their due."

The third line of action which the League is pursuing is its efforts to secure the interest of the teachers in all countries in the movement for international co-operation, so that the whole world shall move simultaneously in one direction. It was for the purpose of developing this plan that the Secretary spent three months in Europe last year. The result of this work is an organization of an International Council which shall consist of two repre-

sentatives of each country of the world. This Council has six objects: First, to organize national groups of teachers in the interest of internationalism. Second, to collect and distribute publications relating to internationalism which are of specific value to teachers; and to make an organized campaign to place literature in college and school libraries. Third, to extend information on such educational movement thru the magazines of every country. Fourth, to stimulate the development of all devices that will bring about international understanding, such as the international exchange of university professors, teachers, pupils; international correspondence among school children, and international prize essays. Fifth, to seek means of establishing international standards of instruction, especially in literature, geography, and history, which shall develop among the pupils of all nations a common sentiment in favor of international friendliness. Sixth, to maintain an international speakers' bureau which shall consist of a list of approved speakers with the object of recommending them for the programs of international educational conferences.

The Secretary of the League visited Sweden, Denmark, Holland, Belgium, France, Germany, and England, and in every country found a most cordial response to the ideas both of national groups and of the international body. While attending the International Peace Congress at Stockholm, the International Congresses on Home Education and Popular Education in Brussels, the Secretary met prominent people from thirty-two different countries, and in nearly every case an organizing group was selected which can be approached to initiate work in its particular country. Steps in this direction have already been taken in Norway, Sweden, Denmark, Finland, Belgium, France, and England. Last autumn the School Peace League of Great Britain and Ireland was organized on practically the same lines as the American School Peace League.

We hope to see before another year comes round the formation of several national leagues with a central administrative body which shall co-ordinate and extend these educational efforts. The work of these leagues stands for broad citizenship and calls for the support of every true educator thruout the world.

D. EDUCATION OF THE AMERICAN INDIAN

H. B. PEAIRS, SUPERVISOR IN CHARGE OF INDIAN SCHOOLS, LAWRENCE, KANS.

The first tableau given on this stage on Thursday evening brought to mind very vividly the first tableau that was ever thrown upon the screen of this country; namely, the landing of Columbus on the eastern shore of this continent. The principal characters in the picture were Columbus and his associates standing on the beach looking shoreward where stood a group of red men of the forest curiously gazing into the faces of the newcomers. After placing the flag of their country and taking possession of

the new land in the name of the King, white man and red man exchanged greetings cordially. Such was the first meeting with the Indians. Soon another scene followed. It was much as follows: Several red men bound hand and foot being forcibly marched onto ships anchored at the shore, ready to make a return trip. Rapidly following this came battle scenes; Indians fighting to save their possessions. Any race which would not have fought under such circumstances would not be worthy of the name of American. The Indian would never be enslaved. He fought and died in preference. Continuing the picture, we in our imagination can see the Indian retreating, fighting every foot of the way, the victors grabbing and holding all they conquered. The next scene shows the Indians collected on bodies of land known as Indian reservations, these surrounded not by barbed wire fences as during the Cuban War, but by soldiers with fixed bayonets ready to charge if any Indian should attempt to leave the reservation. Up to this period the treatment of the Indian might be said to have been inhuman. At this time, however, the scene changes and the humane element in the treatment of the Indians is introduced. It was decided that it would be cheaper to educate the Indian than to fight him. Schools were planned and built. Gradually but slowly the number was increased, being built mostly by missionary effort in the beginning. Later the government took up the work, and as is always true in this great country of ours, the work undertaken by the government has been well done. Approximately $60,000,000 have been expended for Indian education. More than 350 schools have been erected and are now being maintained. Today approximately 35,000 Indian boys and girls are attending these schools. Thoro elementary, academic, and industrial training is being regularly given during nine months of each year. The usual literary subjects are taught to both boys and girls. In addition the boys are taught handwork, not merely manual training but actual industrial work, such as farming, gardening, stock-raising, dairying, blacksmithing, carpentering, masonry, painting, the elements of steam engineering as applied especially to heating, harness-making, cobbling, tailoring, printing; and the girls are taught cooking, sewing, laundering, general housekeeping, nursing. Picture if you will in your minds 350 day and boarding-schools scattered over 22 of the states of the union, with groups of from 10 to 30 children in the day schools and groups of from 50 to 1,000 in boarding-schools, mass them all together until you have a picture of 35,000 red children varying in age from 6 to 21 years, and you will have an educational picture into which the humane element has been introduced and is taking a large place.

The picture is very incomplete, however, as Indian education does not stop with the children. It deals with adults as well. Fathers and mothers, yes, grandfathers and grandmothers, are included. All over the country wherever Indians have land, allotments have been and are being made,

and the Indians are being taught the necessity of having permanent homes. Schools located on reservations among the Indians are being constantly urged to emphasize the value of home life. Such schools are in fact community centers and their work is with the family unit, not simply with the children. Schools located away from the reservations place emphasis on the teaching of the home industries, such as farming, gardening, care of stock, the use of simple tools, etc., for boys, and cooking, sewing, laundering, etc., for the girls. Some of them also conduct what is known as the outing system, placing boys and girls in homes where they may learn lessons of home life from actual contact and association with them, the purpose of such work being gradually but surely to improve the Indian home. Other very important features of Indian education that might be pictured, if there were time, are the very active campaigns that are being made under the direction of the Indian Bureau in an effort not only to relieve the diseased and distressed who have been marked by the dread diseases of tuberculosis, trachoma, and others, but also to prevent so far as possible any further extension. Also the campaign is carried on against liquor traffic among Indians, and in enforcing proper marriage and divorce laws.

My time is short; therefore I must not dwell at greater length upon what is being done. The Federal government has done and is doing much, but I should like to call your attention for just a few moments to some things which it would seem might be better done by state and local authorities than by the Federal government.

Among the resolutions adopted by this conference yesterday was the following:

> The department is most heartily in sympathy with the policy of the Bureau of Indian Affairs to promote and encourage the attendance of Indian children in the public schools and authorizes the out going president to appoint a committee of five to investigate the present conditions of the Indians with reference to their relation to the public schools for the purpose of determining what co-operation or supplemental work is practicable.

I trust that I may be pardoned if I suggest some needed co-operation.

1. In securing attendance in some school of every Indian child of school age who is physically able to attend.

As the Indian children go out of the government school into the public school their attendance will be very irregular unless looked after carefully.

There are approximately 60,000 Indian children of school age in this country. Between 20,000 and 25,000 of them are out of school—many because there is no law to compel attendance. The Federal government cannot enact such a law for the several states. The states must do it. Federal officers are not in a position to take any active part in securing the enactment of such laws. I trust that this may be thoughtfully considered by the members of the committee appointed to represent this Department of Superintendence.

2. Co-operation is needed in the campaign against the sale of liquor among Indians.

3. The work of the health section of the Indian Bureau in an effort to stamp out tuberculosis and trachoma should be supplemented, extended.

4. Proper marriage and divorce laws should be enforced among the Indians. The states must see to the enactment of such laws.

5. Government schools need a much larger eligible list of well-qualified teachers in all departments. State normal schools and agricultural colleges and other public and private educational institutions can, by co-operation, help to secure such help.

6. Many Indian schools are isolated and necessarily the instructors are out of touch with educational movements. A liberal distribution of educational reports, bulletins, and helps of all kinds would be a blessing and great inspiration to such teachers. During the past year the various state courses of study have been adopted by the Indian schools. We do not want to be a side show any longer. We want to become an integral part as far as possible of the great public-school system.

Only by such contact and competition may the Indians ever become good, independent, productive citizens.

I hope that the appointment of a committee for the study of the conditions of the Indians by members of the Department of Superintendence of the National Education Association will mark a new era in Indian education.

REPORT OF THE COMMITTEE ON THE MEXICAN CENTENNIAL

HORACE H. CUMMINGS, GENERAL SUPERINTENDENT, L.D.S. SCHOOLS, SALT LAKE CITY, UTAH

At the annual meeting of the Department of Superintendence two years ago an invitation was received from the Mexican government thru its Department of Education for this body of superintendents to meet in the City of Mexico during the month of September, 1910, and take part in the grand centennial celebration of Mexican independence. If impracticable for the entire body to meet there, it was urged that a delegation be sent to represent them. Accordingly Francis G. Blair, state superintendent of Illinois, Edmund A. Jones, at that time commissioner of common schools of Ohio, and Horace H. Cummings, general superintendent, L.D.S. schools of Utah, were chosen as delegates. Unfortunately, however, when the time arrived for the visit it was impossible for the first two members of the delegation to go, and the duties of the three fell upon the shoulders of the one least fitted to discharge them.

Similar invitations were sent to leading educational institutions of the world and some forty or fifty delegates from the great universities of Europe and America were present and took part in the festivities

On arriving at the City of Mexico the delegates were met by committees appointed by the Secretary of Public Instruction, and escorted to good hotels where they were given every comfort, convenience, and attention. In fact, more skillful and generous hospitality could hardly be provided. Every want was anticipated and provided for almost before it was felt. Carriages and automobiles carried us to and from the various functions, chairs

at the opera were provided for unoccupied evenings, and attentive servants were always within call. For two or three weeks we enjoyed the proverbial hospitality and politeness of the Mexicans, which must be experienced to be truly appreciated.

The centennial celebration lasted during the entire month of September, but the important educational features did not begin until after the tenth and most of the delegates did not arrive until September 12. From the moment of their arrival, however, they were kept busy, for from two to five functions in which they were expected to take part occurred every day until the time arrived for their departure. It was indeed a time of strenuous pleasure as well as profit.

Among the many interesting educational features the following important ones are mentioned, but space forbids more than the briefest account of them:

1. The Seventeenth Congress of Americanists convened and held daily sessions for about two weeks. This is an organization of archaeologists devoting themselves to the study of American antiquities. Mexico offers the richest field for such research, and the government has been very liberal in appropriating means to aid them in their work. Excursions were given to the delegates to some of the most important of the ancient ruins which are being uncovered and restored. A wide interest is felt in this work.

2. A national primary industrial school was inaugurated with fitting ceremonies and given a new modern building to occupy. This will provide for the introduction of industrial education into their system of schools, a feature for which the children there have a natural aptness.

3. The establishment of a normal school for primary teachers was not only a beautiful and impressive exercise, but a movement of the greatest importance, for the conditions there seemed at once to render such an institution necessary, and to insure it a useful and successful career.

4. The inaugural session of the National Congress of Primary Teachers occurred September 13 and was followed by daily sessions thereafter until their work was finished. Here reports were given from the various states and districts comprising the Republic of Mexico, showing the condition of progress of elementary education in each, and plans were stated for future improvements. In considering the statistics setting forth cost of school buildings and equipment, the number, sex, and salaries of teachers, the attendance of pupils, etc., the reports on the whole were most gratifying and demonstrated that rapid and substantial advancement is being made where it is most needed and will do the most good to Mexico.

5. The opening of the Mexican Medical Exposition was an event well calculated to give an idea of the attention given and the progress made in the science and practice of medicine in that land. A national medical congress was also inaugurated September 19 with imposing ceremonies and held a number of sessions during the month. The latest medical

problems are receiving attention there, and the best methods of public sanitation are being introduced.

6. One of the prettiest of all the educational functions was the ceremony connected with the inauguration of the National School of Higher Studies, attended principally by the educational delegates, and conducted by the Secretary of Public Instruction and Fine Arts. Here that earnest worker for Mexico's educational progress, Sub-Secretary Chavis, who will be remembered affectionately by many of us for his recent visit to our gathering, gave a most lucid and earnest outline of the work of this institution.

7. The Exposition of Mexican Contemporaneous Art opened with the usual formalities on September 19. It was something much enjoyed by the visitors. The exhibit consisted chiefly of oil paintings and pieces in water colors. A few specimens of mechanical and architectural drawing were present, but almost no work in sculpture. The many original works were characteristic in some respects and possessed a good degree of merit.

8. The Teachers College of Columbia University presented the Horace Mann School of the City of Mexico a large portrait of that great American educator. The gift was accepted with appropriate and beautiful ceremonies in which the pupils of the school took part. Most of the delegates from the United States were present and greatly enjoyed the exercises.

9. The most formal and imposing of all the educational functions were no doubt the ceremonies connected with the inauguration of the National University of Mexico. The President of the Republic, the members of his cabinet, and the delegates from foreign universities occupied the platform. The Secretary of Public Instruction and Fine Arts directed the exercises, and President Diaz at the proper time arose and declared the National University of Mexico fully and legally established. Short congratulatory speeches were made by several of the delegates after the purposes and scope of the institution had been set forth by the Secretary of Public Instruction. It is intended that this institution shall rank with the great universities of the world and be a fitting head for the national system of education which received so important an impetus during the centenary celebration.

After these exercises were concluded the delegates were conducted into the chamber of the University Council, where we were all introduced to President Diaz and members of his cabinet. It was plainly to be seen that the President was greatly pleased with the educational features of the celebration, and that he is certainly a patron of public instruction. After a short period of conversation the delegates were conducted to a banquet hall where a sumptuous feast had been provided by the National University, and all were invited to another in the evening at Chapultepec, the official home of the president.

10. The next day was spent under the direction of the Secretary of

Public Instruction at Xochimilco. Besides a grand ball and banquet, the visitors saw the famous floating gardens of that place. These consist of quadrangular islands about two rods wide by three or more rods long, in the midst of a shallow lake. The owners or renters dart hither and thither in canoes among them; and I am sure the visitors never saw so many useful plants growing to the square inch before. The soil is black and rich and yields three or more crops each year. That these same gardens have been subject to this intense cultivation from time immemorial and the fertility of the soil retained is truly wonderful.

A grand ball given by President Diaz in the National Palace was the concluding event for most of the delegates. To describe it if I were able would not be necessary here, but it was a fitting climax of a wonderful and almost bewildering series of functions, crowding upon one another during almost an entire month, in commemoration of the one-hundredth anniversary of Mexico's independence.

Perhaps nearly a hundred functions besides those mentioned took place during the celebration. Many of these were indirectly educational and nearly all of them were conducive to a broader and better civilization. A few of these should be mentioned in this report, as follows:

The inauguration of an Exhibition of Hygiene; the dedication of a new building for the Secretary of Foreign Relations; the opening of the Exposition of Spanish Art; the opening of the Japanese Exposition; an excursion to the ruins of Teotihuacan; the laying of the corner stone of a monument presented to Mexico by the American colony, and of a monument of Pasteur presented to Mexico by the French colony; the unveiling of a large marble statue of Baron von Humboldt presented by the Emperor of Germany; a grand torch-light procession; a grand civil procession; a most artistic and unique historical procession; an imposing military parade in which several nations participated; imposing ceremonies in commemoration of the hundredth anniversary of the first cry for liberty; the opening of the Congress of the Union; the unveiling of a large and most beautiful statue of Juarez; the opening of the new city water-works; the completion of the new sewer system, and a new addition to the penitentiary; the remodeling of the Municipal Palace; besides a great number of events commemorative of military exploits, deeds of patriots, etc.

Most of these ceremonies were very formal, solemn, and impressive, and were well calculated to demonstrate the progressive policy of the administration. No doubt large sums of money were required to defray the expenses attending a celebration so elaborate and prolonged; yet it was certainly conceived in a spirit of the highest economy, since there was so little spent simply for show. Barring the gorgeous displays of fireworks and electrical illuminations, most of the features of the Centenary consisted of needful modern public improvements, begun at the proper time to be completed for the occasion, and permanent in their nature.

There were no regrets that costly buildings and displays would be destroyed after the celebration. It was a gigantic affair, very impressive, instructive, and enjoyable, with few things about it to regret.

In this connection it may be well to state that the City of Mexico now seems to be as clean, as well drained and paved and supplied with water, as any of our own large cities, and is with its even and delightful climate a safe and pleasant city in which to live.

Since real conditions, however, cannot be judged from dress parade exhibitions, I took excursions into the suburbs, which I found clean and sanitary—a remarkable change since I used to live in Mexico twenty-five years ago. I also visited rural schools in three different towns, Ciudad Juarez, Ixtacalco, and Tlalpam, and in one of them I was invited to conduct a recitation in history.

I found the children, most of whom are full-blooded Indians, very polite and intelligent—far more capable than the Indians of our own country. Tho the conditions and methods in the schools have improved much since my former acquaintance with them, they are still much behind the times. The little restless tots are confined in school from nine till five and sometimes longer. The charts and texts used reminded me of my own childhood school days in the far West. Still, elementary schools are much more numerous and teachers use better methods and are better paid than formerly, and I was often impressed with the thought that Mexico is one nation, at least, who does not in her rapid rush toward higher civilization destroy her native races, but patiently helps them along the same road.

The attitude of the administration toward education is most gratifying. Within little more than half a decade the Secretary of Public Instruction and Fine Arts has been advanced from a subordinate branch of the Department of Justice to that of a Cabinet minister, while the national appropriation has been increased in four years from $2,000,000 to $8,000,000. The new school buildings are of the latest and most approved styles—well lighted and ventilated. The same is true of other public buildings. The new City Post-Office is a model of beauty, stability, and convenience, while the new opera house nearing completion will have few equals in the world. The hotels also show the spirit of the modern movement which is everywhere.

But more in the broad, wise, and generous treatment of the education of the masses than in any other feature do I see the true foundation of Mexico's future success and greatness. It is chiefly thru her schools that she may hope to prepare her people to exercise safely and wisely the freedom and power of self-government so well provided for in her constitution.

TOPIC: THE PROGRESS AND THE TRUE MEANING OF THE PRACTICAL IN EDUCATION

A. IN VOCATIONAL TRAINING

CARLETON B. GIBSON, PRESIDENT OF MECHANICS INSTITUTE, ROCHESTER, N.Y.

The agricultural and industrial development of our country brings anew the old cry for the practical in education. Notwithstanding the exodus of population from the rural districts to the urban centers of civilization, more or less alarming in certain centers, our agricultural products have, within the past two decades, increased from three billion to the enormous sum of nine billion dollars.

Thru the technical training given in the more progressive agricultural schools and colleges and thru the unusual work of our efficient national Department of Agriculture, the broad acres of America have been made to yield threefold. And yet anyone who rides thru almost any section of our country must feel that agriculture as a science is still in its infancy, and general agricultural education has only begun.

Notwithstanding all the work of the schools and colleges and the various branches of our national and state departments of agriculture, perhaps not more than 10 per cent of those now engaged in farming as a vocation have had any technical training, or have even felt the stimulus of a general increase of interest in better farming methods.

On a few scattered acres of the many millions in this country, it is true that one hundred bushels of corn have been made to grow where less than twenty grew before, and much has been done to disseminate information of this wonderful increase. In a few places in the South, we hear of three bales of cotton being raised on an acre when the average over the South is one bale to five acres.

Thru the processes of plant breeding and scientific agriculture, some increases in the production of wheat per acre have been quoted. Much attention has been given to raising apples and citrous fruits, but it is not in any sense general; indeed, the marked improvements in products have been of rather a sporadic nature and we may not be surprised to find within the next ten years even at the same rate of exodus from the country to the city, that our increase in farm products will be far more than three or even tenfold more than they are today.

The growth of cities has brought a wonderful increase in manufacturing. The products of the soil must be turned into useful forms. The wealth of the mines must be made available for the people. Clothing must be prepared to meet increasing per capita demands, and the great increase of our population, and the marvelous inventiveness of the American Yankee must have an outlet thru thousands of newly manufactured articles.

Not only is the amount of manufacturing increased even beyond the

rate of growth of our population and the ever-increasing demands of urban life, but the variety of manufactured articles has increased in even greater ratio.

In 1890 our exports of manufactured articles were one hundred and fifty million, Germany's one hundred and sixty-five million. In 1908 our total export of manufactured articles was six hundred and sixty million dollars, while Germany's amounted to a billion and seventy million dollars. Our home consumption of manufactured products has doubtless increased in even greater ratio and the "Made in Germany," with which we are familiar, leads us to believe that a large part of Germany's exported articles find use in America. Notwithstanding our great increase in manufactured products, we have not yet been able to supply the demands of our own country.

There are three essential factors in the building of industry. These are: capital, managerial brains, and skilled labor. Thru the wealth-producing power of the American and great aggregations of fortune, there has not been wanting abundant capital for legitimate manufacturing enterprises. The oldest schools of technology and engineering, and many manufacturing establishments have turned out men equipped with managerial brains, but the supply of skilled labor has in no sense been adequate to meet the demands of manufacturers.

The great influx of foreign population into certain sections, and the drafts upon the less thrifty of our rural population in other sections, have not yet brought an adequate army of toilers, and in no sense has the skill of these workers been satisfactory.

The one factor in industry for which there is great and growing demand today is skilled labor. This demand creates a throng of opportunities for remunerative service. Many of the higher grades of industry have been trying to import this labor from the older centers of industrial civilization and from countries that have given more attention than has America to the industrial training of her children.

But the supply seems to be growing somewhat less and the demands of high-grade manufacturers have been increasing. Advertisements and expert labor scouts have not been able to bring to a certain class of manufacturers anything like an adequate supply of satisfactorily skilled labor to meet their annual loss by death, old age, or the migratory impulses of the workingman. Some of these institutions have been forced at enormous expense to undertake to supply this demand by instituting schools of their own.

The National Association of Manufacturers declared in its last convention, with feeling and impressive unanimity, that—

> the time has arrived when all discussion regarding the importance of industrial education should give place to the establishment of schools, and to other methods of securing such industrial training.

And it cries aloud for trade schools, for the enrichment of training in factory or apprentice schools, for half-time schools, for evening schools where special skill and shop practice in various branches of mechanical trades may be had, for half-day schools co-operating with shops, for independent industrial schools, for all kinds of schools of a practical nature that will increase the immediate efficiency and earning power of young workers.

The American Federation of Labor declared at its Toronto meeting that "the future welfare of America depends largely on the industrial training of our workers," and said:

> The inquiries of the committee seem to indicate that if the American workman is to maintain a high standard of efficiency, the boys and girls of the country must have an opportunity to acquire educated hands and brains, such as may enable them to earn a living in a self-selected vocation. No better investment can be made by taxpayers than to give every youth an opportunity to secure such an education. The committee recommends that the technical education of the workers in trade and industry, being a public interest, should not be a private but a *public* function, conducted by the public and the expense involved at public cost.

The report of that special committee, signed by John Mitchell, chairman, and approved by the Committee on Education, was adopted by the federation.

The cry for the practical in education has not been limited to a certain class of educators, nor to a few educational conferences, but it has come in no unmeaning terms from employer and employee.

But this cry for the practical in education is not peculiar to the present time. While at some times it has been louder than at other times, it has always existed; and the nature of the demand has depended upon the social ideals of the people.

When the social ideals were physical strength, and beauty, and symmetry of human form, there was a national cry for the practical in education and the people demanded that the youth be trained, almost wholly, thru athletics.

When the social ideal was achievements of war and conquest thru arms, the cry for the practical in education was that every boy be given a soldier's training and be inured to hardship, to stern discipline, and skilled in the use of implements of war.

When the social ideal became veneration for the achievements of ancestors, and culture was measured by the knowledge of the events of the past, the cry for the practical in education was that these ideals might be furthered by a constant conning-over of the ancient books which recounted the glorious deeds of the forefathers.

When the social ideal was a broad and general knowledge of the classics and an acquaintance with the literature of foreign tongues, there was a demand that the youth of the schools be brought from other forms of training which were considered purely cultural and be made to study thoughts

of more or less remote antiquity as given on the printed page, and their culture slowly began to be measured by their easy familiarity with such literature.

When, thru the recognition of the value of science, the social ideals became the promotion of scientific investigations, laboratories became the workshops of the schools and there was a cry for the practical in education, or the training in these laboratories. And it gradually came to be recognized that real culture could be had in conforming to that social ideal.

When, in these modern times, the social ideal of the people has come to be the transformation of crude, raw material into forms of beauty and usefulness to the people, the cry has gone up in no unmeaning terms for the practical in education thru vocational training; and in time it will come to be recognized that true culture may be developed even in the workshops of the school.

It is generally conceded that manual training carried on in connection with public schools, however faithfully the work may have been done, has not produced and is not now producing results adequate to meet present needs.

The tendency seems to be to get away from the conduct of manual-training shops for purely cultural or educational purposes, and industrialize them as the basis of vocational training. If this be done with any degree of effectiveness, it will be necessary for those now engaged or about to engage in the teaching of manual training in the grades to break away from a graded course merely for instructional purposes and give students some introduction to the practical utility of their handiwork. There is an increasing demand for actual shop experience in teachers of manual training.

In anything above the grades of the elementary schools, an industrial training should begin to be specialized and lead very early into a definite trade.

The National Association of Manufacturers and the American Federation of Labor have both declared strongly in favor of trade instruction. The former says:

> A trade school cannot be too practical; the more practical, productive and commercial, the more possible is mechanical efficiency as well as mental discipline and general culture.

The latter says:

> We favor the establishment of schools in connection with the public-school system at which pupils between the ages of 14 and 16 may be taught the principles of trades, and the course of instruction in such schools should include shop instruction for particular trades.

They also advise that to keep such schools in close touch with the trades, there should be local advisory boards, including representatives of the industries, employers, and organized labor.

It is not a matter of supreme importance whether the graduates of these schools go immediately into trades as satisfactory journeyman workers at full wages, or for a term of years during the development of trade instruction in connection with public schools they be merely introduced to the trades with a good foundation upon which to build their wage-earning power.

That trade instruction may be successfully given boys between 15 and 17 years of age may be shown by the records of the graduating classes of one of our trade schools for the years 1905 to 1909 inclusive. On November 1, 1909, it was found by investigation that of 268 trade graduates, 244, or 91.7 per cent, were working at their trades; the bricklayers' average wage being $4.64 for 8 hours a day; carpenters', $3.84 for 8 hours a day; machinists', $3.28 for 10 hours a day; pattern-makers', $3.10 for 10 hours a day. Of the trade classes graduated March 26, 1910, it was found within six months after graduation that of 51 graduates, 50 were engaged at their trades, with the following results: 12 bricklayers, averaging 51 hours per week, at 40.5 cents per hour; 13 carpenters, averaging 51.6 hours per week, at 30.6 cents per hour; 11 machinists, 55.7 hours per week, at 26 cents per hour; 10 pattern-makers, 54.6 hours per week, at 30.3 cents per hour; 4 steam and electrical work, 61.7 hours per week, 20.6 cents per hour. The average hours per week of the 50 was 53.79, the wage-earning power per hour 30.8 cents.

That school is in the serious business of preparing its students, thru academic training and a specialized trade, for intelligent citizenship and good earning power in industrial occupations. Its work continues thruout the year, 8 hours a day, five and one-half days a week.

One of the beneficial effects of instruction in agriculture and the mechanical trades promises to be greater conservation of opportunity in education thru the reduction of time lost in vacations and short daily sessions, which in the old forms of education seemed to be necessary. A practical school of agriculture cannot well succeed when the school is closed during the months of growing crops. The graduates of a trade school will not easily and gracefully link themselves to trade conditions if the trade student has accustomed himself to very short daily hours, full holiday each week, and a long vacation thruout the summer. This conservation of opportunity will mean a considerable financial saving, in that the number of hours of shop and classroom instruction per year may be greatly increased and the number of years of twelve-month periods necessary for preparation may be proportionately reduced. The increase of hours per year may safely be made much greater than the necessarily resulting increase in annual expenditures for education.

It is interesting to find the public-school systems of a few progressive cities leading in this movement of such tremendous economic importance

DISCUSSION

CARROLL G. PEARSE, superintendent of schools, Milwaukee, Wis.—Within a decade practical education, as typified in vocational training, has established itself as a part of our public educational system. Previous to that time, the general sentiment among school people was against the plan of making education practical to the extent of training young people for vocations by which they might earn money. But within ten years the obligation to do this has become so generally acknowledged that it may now be considered as accepted that our educational ideal includes schools where young people can be trained in handicrafts and other employments by which they can earn a livelihood.

We have long recognized the propriety and necessity of providing schools in which those seeking to enter the learned or highly skilled professions—law, medicine, engineering—might be prepared for their work. The proper education of persons who were to exercise these callings has been thought so important that the public has very generally been willing to bear the expense of schools in which this training might be given. Universities supported by the public quite frequently include colleges of law, medicine, civil, mechanical, electrical, and mining engineering, and, of late years, colleges of agriculture.

At the same time the public demand for vocational training has led the secondary schools to provide courses in which young people are trained to earn money as bookkeepers, cashiers, and stenographers. These "commercial" or business courses in our high schools have been well patronized and have supplied an evidently felt want. More recently some of the agricultural colleges, and in some states special schools of agriculture of secondary-school grade, have been giving to the young people from the farms, and to others who wished to learn the elements of agriculture, an opportunity to fit themselves for this work.

But we are only now beginning to establish and to include in our educational system schools where young men and young women can be trained in handicrafts—where they can learn mechanical trades and become skilled craftsmen and craftswomen. A few of the large cities have schools of trades for boys or schools of trades for girls, and a very few cities have both. In the best of these schools young men and young women are taught all departments of the work of the trade; they are taught to use all the tools of the trade, including machine tools; and further, they are not confined to one, or two, or three, or a small part of the processes of the trade, but each student in the apprentice school is taught to do all the things which a competent and skilled workman at the trade should know, as well as to use all the hand and machine tools required for the most successful practice of the trade. These schools are fighting their way; they are also winning their way.

So-called "trade schools" of cheap and inferior quality maintained by private persons, preparing young persons hastily in a part of the knowledge and practice of a trade, have done much to injure the standing of trade schools. This standing the thoro and well-planned trade schools are gradually regaining thru the excellent work of their graduates.

There has been a prejudice against these schools on the part of the proprietors of shops who perhaps have had experience with the poorly prepared product of private "commercial" trade schools. There has been a prejudice against graduates on the part of the foremen of the shops and factories who learned their trade in the old method by long apprenticeship and who also have suffered from the poorly prepared students sent out from the commercial trade schools.

There has been some feeling against these schools too, on the part of mechanics, some of whom feel that not all the parts of the trade can be learned in a school. While it is true that in the building trades experience in the erection of buildings and in the putting together of their parts must be learned in some of its features "on the job," after leaving the school, yet the advantage which pupils in the trade school have, thru the fact that they are taught by skillful mechanics who are at the same time careful teachers of the processes and applications of the trade, more than offsets the lack of practice upon the work. The speed which the journeyman mechanic needs, and experience in putting materials into place on the job,

are quickly acquired by a well-trained trade-school graduate who has been taught all the processes of the trade and knows also, in theory, how the construction work should be carried on.

Another cause has prevented these schools from enrolling as many students as they should have: boys who are old enough to begin the learning of a trade are also old enough to go into some unskilled employment and earn a few dollars per week. Too often the temptation of the present few dollars is great enough to make the young people and their parents disregard the much greater advantage which comes from a thoro grounding in some good trade, and the boys and girls are allowed to enter employments as messengers, cash girls, unskilled workers in factories, and other employments which, while furnishing a small amount of ready money weekly, do not lead to improved positions, and do tend to keep the young people from rising into the ranks of more skilled and better-paid labor.

The sentiment of many mechanics has also been adverse to these schools; sometimes because they feared that too many craftsmen would be turned out. The more intelligent among them, however, do not seem to fear this. They are aware that in other lines of labor more people enter than can at all times find profitable employment. The number of graduates turned out from trade schools cannot, for many years, be such as to overstock any trade. Only a few cities are likely to have trade schools and not all the graduates of these schools are likely to settle down in the town where they learn the trade. They will be scattered about the country.

But, while we have accepted and are acting upon the principle that we may properly teach handicrafts to young people who have finished the work of the elementary schools and have reached the secondary-school age, we are not prepared to accept the principle which is now being advanced that the teaching of vocations ought to be carried down into the elementary schools. The common or elementary schools ought to be the training-ground for all the citizens of the state, for those who enter the learned professions, the skilled handicrafts, commercial employments, agriculture—all the various walks of life. Such training as is given in the elementary schools should be of educational rather than vocational character. If we can so revise our courses of instruction in the elementary schools that the boys and girls who finish the grammar grades shall have a better knowledge of the English tongue and better power to use it correctly in oral and written speech, this will certainly be a great advantage to our young people into whatever vocation they enter. If we can also give them some better training in the fundamental principles of arithmetic, and teach them to perform more promptly and more accurately and intelligently the computations which are required of them in the various common relations of life, we shall have done something for all vocations. If we can give to all the boys and girls such training of the hands as shall make them skillful in the use of the elemental hand tools and some ability to work upon materials of different kinds, we shall have done something of real value, no matter what vocation is followed in later life. And if we are able to give to all the girls in the common schools such training in the arts of the home, in cooking, sewing, care of the house and its inmates, as shall make more capable and intelligent housewives out of the 80 or 90 per cent of girls whose lot it is to assume the care of a home, we shall have done much, not only for these individual girls but for the state of which the families over which these girls are to preside form important basic units.

So far we are all prepared to go with those advocates of more and better training in the elementary schools; but beyond this we refuse to be carried. It is no part of the duty of the public educational system to train boys or girls in a little of a trade or occupation in order that they may enter factories and workshops and be from the first more profitable employees to the factory owners because they have been given a little training in performing one or two of the processes carried on in the factories. It is the duty of a public educational system to lay down its course of instruction in these subjects so as to make well-rounded craftsmen, if it enters upon this duty at all. The constant pull of commercial conditions draws enough boys and girls into employments where they acquire no skill

where their work from year to year does not develop them, and does not open to them any future. If we are to teach a vocation, let it be a real vocation, one that it is worth while to teach. Let us ground upon ourselves the proposition that children have a right to their childhood and that the state has a duty to see that they are not robbed of it; that the boys and girls of the nation are to be kept in the schools at least until they have completed the work of the elementary grades; and that only after this has been done, with full opportunity for learning those things which the common schools can teach to foster good citizenship, should they be allowed to take up the work of preparing themselves for specific vocations.

We, in planning our educational system, must be wiser than those owners of forests who allow the small trees to be cut down; we must be wiser than those breeders of horses who put two-year-olds upon the race track. We must allow our boys and girls to grow out of their childhood, at least into the early years of their youth, before we begin in the public schools to classify them according to the occupations which they plan to follow thru life. Let us never lend ourselves to the pressure which will be many times applied to induce us to train our boys and girls of tender age in the common schools into deft mill hands to feed the maws of those factories where boys and girls, men and women, spend days and weeks, and months and years in repeating over and over and over again, countless thousands of times, the same set of motions in the tending of a machine or in the performing of a single process which the complex organization of our modern system of manufacture sets apart from them. While, no doubt, hands will be found to do this work so long as these great institutions are organized upon their present basis, yet it is no part of the duty of the public schools to so shape our boys and girls in the elementary grades that they may feed the long files that pass within the factory doors to engage in this stultifying, deadening, poorly remunerated labor.

B. IN THE BALANCED COURSE OF STUDY AND THE ALL-YEAR-ROUND SCHOOLS

G. W. A. LUCKEY, HEAD PROFESSOR OF EDUCATION, UNIVERSITY OF NEBRASKA, LINCOLN, NEBR.

Recent years have increased our knowledge of the laws of nature and of life, and yet we seem far removed from the solution of the riddle of existence. When man was created we know not, how he was created is more of a mystery, but that he is, lives, and desires to live we are most certain. As a child of Nature he is subject to certain, definite, physical laws, some of which we know, more of which we may know. It is the province of education to bring man into harmony with these laws, to enable him to understand them and to use them to the betterment of himself and of others.

In the study of education it becomes necessary to know the nature of man, to have a standard of values, a philosophy of life. What is the meaning of creation, and the purpose of humanity? Why are we here? Why are we given such a short period in which to accomplish the world's work?

The more we study the problems of life the deeper our conviction that the hand that made us is divine. In creation, man is the finished product.

Everything seems adapted to his needs, his comfort, and his spiritual good. Limited in body, he may become universal and eternal in soul. For man's highest success and truest happiness but one thing seems absolutely demanded—to develop in harmony with this world-order of which he is a vitalizing part.

The thing that is greatest in this complex whole, and that for which everything else seems planned, is life. Men come and go but life continues always. To conserve the life he has, to increase and enrich it, and to give it to others, is, I believe, man's highest mission. In fulfilling this truly he receives the truest and most lasting happiness. Nature has provided for this by making possible healthy reproduction, but to truly live means more than being born well. It means to discover the laws of life, to enrich the soul and become spiritually dynamic. Here is the work of the teacher, the inspirer of youth.

Hence in the truest sense education is the development of life, the arousing and bringing into control and efficiency latent possibilities. It is the process of teaching one how to live, of giving the psychic control of the physical, the soul control of the body. Education always means change in the functioning of an organism and this change to be vital must take place at the time of growth and in harmony with the natural laws of development. Eating may cause growth but it is exercising, thinking, and willing that make character.

Where there is no life nor growth there can be no education. It has been found, however, that a veneer can be given which simulates education but in no way modifies or affects human action and culture. To make education real it must occur in connection with nascent periods and the desire or impetus must be aroused from within. Hence in the education of children it is important to know how to strengthen and increase life and to make it self-directing and self-sustaining.

We are interested in the physical only as it affects the spiritual, but the relation is close and the interaction important. So far as we are aware perfection of soul can occur only in perfection of body.

Education and nature must go hand in hand. Both are conservative and tend to establish norms. Too great variation from these norms means death, while slight variation if in the right direction may mean greater life. In this connection the most fitting man seems to be the balanced man. He is the more tenacious of life. He transmits more permanent qualities to offspring. He is nearer the universal type, the *genus homo*, and exerts upon others a more immediate influence. The healthiest life is the balanced life and the education that is strongest and best parallels physical growth and development.

The body as we know it is an exceedingly complex organism. Beginning with a single cell it soon becomes an organized community of billions of highly differentiated cells acting as a unit. In this growth there is law and

order, all parts do not develop simultaneously, some grow first, others last. All individuals follow closely the same order and have most in common; however, growth furnishes many abnormalities and variations from the type. Faulty education tends to increase these.

The physical variations or abnormalities of children seem to be greatest between the ages of eight and nine, and become less pronounced with the adjustments of growth during adolescence. Habit variations are probably the greatest at sixteen or seventeen. Abnormalities are greatest in children who are below grade. Defective body structure must mean defective brain or nerve structure, and hence defective psychic life. All this seems to point toward the necessity of a balanced course of study, worked out in harmony with, and according to, the needs of natural development.

In harmony with the laws of physical development there seem to be at least four rather clearly marked stages of mental development: the first covering the period from birth to six or seven, the second extending to fourteen, the third to eighteen or twenty, the fourth continuing thru the rest of the plastic life. There are overlappings and some elements and needs common to all periods, but the distinctions are sufficiently marked to be carefully noted in all true education.

The first is the kindergarten period, in which the child thru the exercise of instincts gains intelligence and acquires a limited amount of muscular control. As Froebel has said, it is the period *par excellence* for rendering the inner outer. The second is the period *par excellence* for gathering simple facts, concrete material; for gaining fundamental muscular control and acquiring the use of the fundamental instruments of education, e.g., reading, writing, drawing, music, numbers, and the elements of language and science. The third is the period of youth, the period of organization and construction, of generalization and the perceiving of relations; the period of transition from boyhood to manhood, from being self-centered to altro-centered. The fourth is the period of specialization, of research, of purer and clearer thinking, and of constructive willing. It is the time of service, of vocational activity, of the Master's business, and the world's work.

During the first two periods the necessity of a balanced curriculum seems unquestioned and in a large part of the third it is almost as essential. During these three periods most of the physical and much of the mental become established and to a large degree fixed. From this time on there is less need of a balanced curriculum. If the foundation has been rightly laid the thinking will be of the highest order. Investigation and research will lend a peculiar charm. The student will perceive himself as an atom in a world-whole.

In the true school three things are necessary: organized play for all, motor activity in constructive work, and wisely directed mental effort. We have learned thru the open-air schools that dull, unhealthy children

can be changed in a single year to bright healthy children thru change of nourishment, more fresh air, play, motor activity, and but one-third the time given to mental effort. We might have anticipated the results as many did, but what shall we say of the more fortunate children who are now devoting from a third to a half more time in mental work than is found necessary for the dull? We need a balanced curriculum but we need also a school organized and planned in harmony with the present thought of the necessity in education of work and play.

I agree with Superintendent Elson that the lengthening of the school year is in accord with present-day thought. In the first place it has been found to work favorably with non-promoted children to have a lengthened summer term. Many have made in a few weeks or months what would have otherwise necessitated a year's difference in grade and have acquired better health in doing it. Mental retardation often indicates physical retardation or weakness. If anyone should be free to have a more outdoor life in the summer, it should be the physically weak or mentally retarded child. Since a lengthened school year is found advantageous to the non-promoted child it certainly will be found more advantageous to the healthy, vigorous child. School work should never become drudgery and with more play and motor activity the lengthened school term will add to the child's pleasure.

The processes of learning are going on all the time in every healthy child. Mental growth, like physical growth, is a continuous process. Education, to be vital, must take place during the nascent period. Since growth does not stop during the summer, there is no good reason why the education should. It would be a difficult thing for the child to eat enough during the first nine months of the year to last him, without eating, during the next three. It is just as unreasonable to do without mental food, and especially so during the years when the child is growing and changing so rapidly.

The school is the child's workshop and recreation center. Here he acquires the habits that give meaning and direction to his after-life. When in business, his shop will not close for a summer vacation, and neither should he form habits in youth which would make a prolonged vacation seem necessary. Not only is there a beautiful and expensive school plant remaining idle many months of the year, but the accumulating physical and mental energy of the children is being wasted for the want of direction; or what is more discouraging, the city children are forming the habits of the gang, the loafer, and the hobo. The lengthened term would add to the moral tone, better the health conditions, save both money and time, and strengthen the mental product.

PRELIMINARY REPORT OF THE COMMITTEE ON UNIFORM RECORDS AND REPORTS

To the President and Members of the Department of Superintendence of the National Education Association:

The Committee on Uniform Statistics begs leave to submit the following preliminary report:

Your committee has endeavored, thru the co-operation of school superintendents thruout the country, to bring before this meeting for consideration tentative plans for uniformity in records and reports. The work that we have done has been made possible thru the co-operation of the United States Bureau of Education, which sent out our proposals and received replies with regard to the propositions which we have advanced. In the case of the schedule for reporting fiscal statistics the Bureau of Education, at the request of your committee, invited representatives of the Bureau of the Census, of the National Association of School Accounting Officers, and of our own committee to meet in Washington. Two such meetings were held. As a result of these conferences, the forms which we recommended come before you with the indorsement of all of these bodies, as well as with the approval of a great many superintendents thruout the United States.

The foundation of all statistics concerning pupils is established in the records made by teachers in the schoolroom. Unless these records are expressed in common terms having a definite meaning the data gathered from them are not comparable. School statistics as at present compiled and compared are unreliable and of little value, and they will continue to be so until agreement can be reached not only as to terms used and the definite meaning of these terms, but also, to some extent, as to the method of recording and arranging the original data upon which school statistics are based.

The first work of the Committee on Uniform Statistics consisted of a careful investigation of the subject of school records, and this resulted in the submission of an elementary school record system, thru the co-operation of the United States Commissioner of Education, to school superintendents thruout the country. Altho several forms were offered for the purpose of getting criticisms and suggestions, and for the sake of illustrating the complete working-out of a system of school records, chief emphasis was laid on the *cumulative record card* which was framed to serve as a permanent and progressive record of the pupil's kindergarten and elementary school career. The form recommended follows:

ELEMENTARY SCHOOL RECORD SYSTEM—PROMOTION RECORD

This card is to pass from teacher to teacher or from school to school as the pupil is promoted or transferred. It is to be filled out and sent to the principal's office when any change is made requiring a change in the office records. It is then to be sent to the teacher who has the pupil.

a School	b Date of Admission	c Age Sept. 1 Years Months	d Grade	e Room	f Days Present	g Health	h Conduct	i Scholarship
								(over)

1 1. Last name 2. First name and initial

ELEMENTARY SCHOOL RECORD SYSTEM—ADMISSION, DISCHARGE, AND PROMOTION CARD

3. Place of birth | 4. Date of Birth | 5. Vaccinated

6. Name of parent or guardian | 7. Occupation of parent or guardian

To be kept for every pupil and sent with the pupil when he is transferred to any school, either public or private, in the city or outside the city. Great care should be used to have the names COMPLETE and CORRECT.
Write all dates as follows: 1912-9-25.

8. RESIDENCE. (Use one column at a time. Give new residence when pupil is transferred.)		9. Date of Discharge	10. Age Years	Months

When a pupil is permanently discharged to work, to remain at home, or because of death, permanent illness, or commitment to an institution, this card is to be returned to the principal's office and a full statement of the cause of the pupil's discharge is to be made in the blank space remaining above.

8–304 (over)

After an examination of more than five hundred replies to that part of the commissioner's circular relating to a cumulative record card the committee finds as follows:

1. That there is substantially unanimous assent to the following general proposition: *A cumulative record card should be kept for every child thruout his entire kindergarten and elementary school career.*

2. That suggestions made by correspondents have not shown a preponderance of opinion in favor of any specific increase or decrease in either the size or contents of the card.

3. That in view of those conclusions the card submitted has been adopted as best representing the consensus of opinion on the matter of a cumulative record card, and the committee recommends the general use of this card, or one in substantial agreement with it as to the essential facts needed for statistical data and school administration.

The committee desires to call attention to the following suggestive list of uses to which the card may be put:

1. Amount of attendance of individual pupil for one year.
2. Comparative rates of progress in schools having seven-year, eight-year, or nine-year elementary courses.
3. Classification of pupils by age and grade. (Note that a standard date for computing ages is established, viz., September 1.)
4. Classification of pupils for enrollment data:
   a) Duplicate enrollment in the school.
   b) From other public schools in town or city.
   c) From other public schools in state.
   d) Original enrollment from all other sources.
5. Number of times child has been detained in a grade.
6. Foreign birth as affecting progress.
7. Kindergarten training as affecting progress.
8. Attendance in other schools as affecting progress.
9. Absence as affecting progress.
10. Numerous inquiries having to do with individual school management.

Diverse opinions as to the necessity of certain items on the Admission, Discharge, and Promotion Card, as, for example, item "Conduct," are not necessarily barriers in the way of the uniform use of the form of card recommended; for in any school system such an item may be omitted by direction of the superintendent, or left optional with principals. The value of a uniform card lies chiefly in three considerations:

1. Universal adaptability for use in whatever system of schools the pupil may enter.
2. Decreased cost because of printing in large quantities.
3. Establishment of common practices of record making and common terms for the expression of facts valuable for statistical investigation.

It is believed that any general record card recommended for universal adoption should not include a detailed statement of facts needed for an adequate study of individual cases of physically abnormal and retarded children. For such a purpose a special form should be used providing for yearly records of defective eyesight, hearing, condition of teeth, and other physical characteristics, and for records concerning nutrition, environment, specific cases of illness, special aptitudes, and such other facts as are likely to be desired. The exact form of such a card may well be left for future consideration.

The general cumulative record card and this supplementary card will represent the *minimum* and *maximum* requirements of the individual cumulative record.

It seems inadvisable at the present time to submit for general agreement any specific form for the recording of daily attendance and for monthly and yearly reports of the same; but certain general principles ought to be given careful consideration, and there are some particulars in which uniformity of practice is very greatly to be desired.

The daily register or daily summary should show four groups of admitted pupils as follows:

a) Pupils previously enrolled during the year, including transfers, *within the school or school district.* (This item is thrown out in computing the number of different pupils enrolled during the year in a given school or district.)

b) Pupils previously enrolled during the year *in some other school or school district in the town or city.* (This item is thrown out in computing the number of different pupils enrolled during the year in a given town or city.)

c) Pupils previously enrolled during the year *in other towns or cities in the state.* (This item is thrown out in computing the number of different pupils enrolled during the year in a given state.)

d) Pupils *not* previously enrolled during the year *in any town or city in the state.* (These are original enrollments included in all reports.)

It is not useful to attempt a classification of discharged pupils into four groups corresponding exactly to the four groups of admitted pupils. The following classification is suggested as a desirable one:

a) Pupils temporarily discharged, and transferred within the school or school district.

b) Pupils transferred to any other school, public or private. (Graduates separately.)

c) Pupils permanently discharged to go to work. (Schooling discontinued before completion of elementary-school course.)

d) Pupils discharged for other reasons. (A relatively small number whose schooling is discontinued before completion of elementary-school course for accidental reasons.)

More important, at the present time, than forms for recording attendance and enrollment data, is the securing of a common terminology for certain conditions of attendance and enrollment. The following definitions are submitted as representative of the best practice:

1. *Age and grade classification.*—For this purpose the age on the first day of September should be used. This is the age at which, approximately, the pupil enters upon the work of a new grade. There are good reasons for taking it in preference to January 1, the day on which the work of the grade is partially completed, or July 1, the approximate date on which the work of the grade is finished. It is commonly used in school census enumerations, and is conveniently near the time at which a great majority of pupils enter school. If once recorded on the Admission, Discharge, and Promotion Card it can be made a matter of record for each succeeding year with practically no effort and with little likelihood of error.

2. *Number enrolled.*—It is generally understood that this item means the number enrolled exclusive of duplication, in whatever school unit it is reported for. The way in which this number may be ascertained is indicated under "Enrollment Data," above.

3. *Number belonging.*—As soon as a pupil is known to have left the school *without intention to return* he ceases at once to belong and he is not thereafter included in the number belonging. *If absent under any other circumstances* he is carried on the rolls as "belonging," and marked absent *for five consecutive days* (or until he returns if his consecutive absence is less than five days in duration). He is "temporarily discharged" at the end of five consecutive days of absence, and then ceases to "belong" until he returns to school and is "readmitted."

Five days (ten half-day sessions in schools having two sessions a day) constitute one week in a great majority of schools, and represent a fair compromise between extremes of practice in this particular.

N.B.—"Average number belonging" means the same as "average membership." The average number belonging is found by the same process as the average attendance.

4. *Average attendance.*—The average daily attendance during the school year (which is the average number of pupils actually present each day the schools were in session) may be computed as follows:

a) For a single school: Add together the number of days each pupil was present during the year or the number of pupils present each day during the year, and divide the sum (which is the "aggregate attendance in days") by the number of such school days.

b) For a group of schools having the same number of days in the year (as the schools of most cities have): Divide the combined aggregate attendance in days of all the schools by the number of days in the school year.

c) For a system of schools having different lengths of school year (as, for instance, those of a county): Add together the average attendance of the component schools and groups of the system as ascertained by the foregoing rules. For larger systems, as those of a state, the summing-up process is continued in the same way.

NOTE.—In systems of schools where monthly reports of attendance are called for the general principles of *a*, *b*, and *c*, above, apply to the finding of monthly averages. The sum of the monthly averages of attendance in the schools of most cities, divided by the number of months, is approximately the same as the average attendance for the year found by the methods given above.

5. *Average number of days in the school year.*—In a school system having different lengths of school year in its various units (as in *c*, above), the average number of days in the school year is found by dividing the combined "aggregate attendance in days" of all schools of the system by the "average attendance" as ascertained by the method given in *c*.

The second recommendation of the committee has to do with the form of reporting fiscal statistics. With the variation in record and report which we now have it is impossible to make any adequate comparison of the cost of education as among any group of cities, and usually it is not easy to determine the cost for any particular unit within the school system itself. The form of report recommended by the committee provides for such differentiation as will enable anyone to make adequate comparisons among the several cities of the United States, and, at the same time, calls for a system of accounts which will make it possible to discover the cost of particular types of schools within the system itself.

In some of our cities as much as one-third of the entire city revenue is devoted to education. The demands from all departments for more funds are insistent. Increased expenditures for education must be justified by showing the maximum of return for money already granted. Such evidence of efficiency calls for a system of accounts and of reports at least as elaborate as that which is required to fill out the schedule of fiscal statistics recommended by the committee. The schedule recommended for reporting fiscal statistics follows:

A.—PAYMENTS

I.—EXPENSES (Cost of Conducting School System).	Total	Salaries	Other Objects
EXPENSES OF GENERAL CONTROL (OVERHEAD CHARGES)			
1. Board of Education and Secretary's Office			
2. School elections and school census			
3. Finance offices and accounts			
4. Legal services			
5. Operation and maintenance of office building			
6. Offices in charge of buildings and supplies			
7. Office of superintendent of schools			
8. Enforcement of compulsory education and truancy laws			
9. Other expenses of general control			
10. TOTAL			

A—PAYMENTS—*Continued*

	Total	Schools and special activities							
		Day Schools		Evening Schools		Normal Schools	Schools for the Industries	Special Schools	Special Activities
		Elementary, including Kindergarten	Secondary (High)	Elementary	Secondary				
EXPENSES OF INSTRUCTION									
11. Salaries of supervisors of grades and subjects									
12. Other expenses of supervisors									
13. Salaries of principals and their clerks									
14. Other expenses of principals									
15. Salaries of teachers									
16. Textbooks									
17. Stationery and supplies used in instruction									
18. Other expenses of instruction									
19. Total									
EXPENSES OF OPERATION OF SCHOOL PLANT									
20. Wages of janitors and other employees									
21. Fuel									
22. Water									
23. Light and Power									
24. Janitor's supplies									
25. Other expenses of operation of school plant									
26. Total									
EXPENSES OF MAINTENANCE OF SCHOOL PLANT									
27. Repair of buildings and upkeep of grounds									
28. Repair and replacement of equipment									
29. Insurance									

30. Other expenses of maintenance of school plant									
31. TOTAL									
EXPENSES OF AUXILIARY AGENCIES									
LIBRARIES									
32. Salaries									
33. Books									
34. Other expenses									
PROMOTION OF HEALTH									
35. Salaries									
36. Other expenses									
TRANSPORTATION OF PUPILS									
37. Salaries									
38. Other expenses									
39. TOTAL									
MISCELLANEOUS EXPENSES									
40. Payments to private schools									
41. Payments to schools of other civil divisions									
42. Care of children in institutions									
43. Pensions									
44. Rent									
45. Other miscellaneous expenses									
46. TOTAL									
II.—OUTLAYS (Capital Acquisition and Construction).									
47. Land									
48. New buildings									
49. Alteration of old buildings									
50. Equipment of new buildings and grounds									
51. Equipment of old buildings, exclusive of replacements									
52. TOTAL									

III.—OTHER PAYMENTS

53.	Redemption of bonds	$.....
54.	Redemption of short-term loans	.....
55.	Payment of warrants and orders of preceding year	.....
56.	Payments to sinking funds	.....
57.	Payments of interest	.....
58.	Miscellaneous payments, including payments to trust funds, textbooks to be sold to pupils, etc.	.....
59.	TOTAL	.....
60.	Balances at close of year at	$.....
61.	TOTAL PAYMENTS AND BALANCES	.....

B.—RECEIPTS

REVENUE RECEIPTS

62.	Subventions and grants from state	$.....
63.	Subventions and grants from county	.....
64.	Subventions and grants from other civil divisions	.....
65.	Appropriations from city treasury	.....
66.	General property taxes	.....
67.	Business taxes (licenses, excise taxes, taxes on corporations, taxes on occupations, etc.)	.....
68.	Poll taxes	.....
69.	Fines and penalties	.....
70.	Rents and interest	.....
71.	All other revenue	.....
72.	TOTAL REVENUE RECEIPTS	.....

NON-REVENUE RECEIPTS

73.	Loans and bond sales	$.....
74.	Warrants issued and unpaid	.....
75.	Sales of real property and proceeds of insurance adjustments	.....
76.	Sales of equipment and supplies	.....
77.	Refund of payments	.....
78.	Other non-revenue receipts	.....
79.	TOTAL NON-REVENUE RECEIPTS	.....
80.	TOTAL RECEIPTS	$.....
81.	Balances at beginning of year	.....
82.	TOTAL RECEIPTS AND BALANCES	.....

These two forms of record—namely; the cumulative pupil card and the schedule for reporting fiscal statistics—are each made more significant by reason of existence of the other. It is to be supposed that these accurate records of the attendance, promotion, retardation, and elimination of pupils will be used in connection with the fiscal statistics in order to determine the cost of education per pupil in any school, or if the fiscal schedule be somewhat elaborated, in any subject.

The report has thus far considered the problem of uniform records and reports as affecting cities. The problem of comparison among the several states was also considered by your committee.

The value of educational statistics for purposes of comparisons between states depends largely upon the degree of uniformity and the form and method in which they are reported. Such value also depends in great measure upon the extent to which the terms employed are commonly accepted and definitely understood.

To secure such uniformity of method and form the following recommendations are suggested:

1. That the terms and definitions used by the Bureau of Education be accepted and employed in collecting and reporting all local data by the states, supplemented with such other terms and definitions as the statutes of the individual state may require.

2. That the blank forms employed by the state departments for collecting statistics be based, so far as practicable, upon the arrangement used by the United States Bureau of Education.

3. That all the facts of educational interest tabulated by the United States Bureau of Education be fully and uniformly reported by the states.

4. That the printed reports of the states cover, so far as practicable, for each state the same scope of educational activity as that covered by the reports of the Bureau of Education for the entire nation.

COMMENT ON RECOMMENDATION NUMBER ONE

The first of the foregoing recommendations calls for mutual agreement to accept and employ somewhat arbitrary definitions and terms now variously interpreted, as, for example, "school enrollment," "average attendance," "truancy," "school age," etc., etc. Such definitions should be made by a committee representing the states, but should, so far as possible, conform to any majority practice already accepted, and should be submitted to a referendum of the state departments.

COMMENT ON RECOMMENDATION NUMBER TWO

The advantage of employing forms as nearly as possible uniform in arrangement would be the more rapid acceptance and understanding of the items required under any given subject. The use of such forms by local reporting officers would tend rapidly toward a general and uniform understanding of items now variously understood because they are reported from various points of view.

The blank forms should constitute the subject of further investigation by the Committee on Uniform Statistics or a similar committee and should be subject to a referendum of the state departments.

COMMENT ON RECOMMENDATION NUMBER THREE

An examination of the state reports and those of the Bureau of Education reveals a considerable lack of uniformity in certain fundamental matters reported by the Bureau of Education. The third recommendation would call, therefore, for the extension of inquiry on the part of the states. The following items are selected as representative of facts reported by a majority of the states, but not collected and reported by all of them.

A. School Census.
   a) Not taken by three states.
   b) Sexes not enumerated by thirteen states.

B. School Enrollment.
   a) Lack of uniformity of definition.
   b) Sexes not enumerated by twelve states.

C. Average Attendance.
   a) Statistics uncertain because of lack of uniformity of definition.

D. Teachers' Wages.
   a) No differentiation between sexes by nine states.
   b) The distinction between elementary and secondary schools is not clearly indicated by many states.

E. Private Schools.
   a) Statistics for the majority of states are inadequate. Seven states report no statistics. Other states gather such statistics, but not uniformly in time or method with those for public schools. A number of states give approximate figures only.

F. School Revenues and Expenditures.
   a) Methods of gathering and reporting these figures vary greatly among the states. Suggestions for improving these form the subject of another section of this report.

G. Classification of School Expenses.
   a) See note under F.

COMMENT ON RECOMMENDATION NUMBER FOUR

An examination of the state reports reveals no general practice relative to the publication in school reports of statistics of educational movements and institutions not under direct public control.

It is apparently the practice of many states to include in the public-school report figures and statistics relative only to those items which are specifically controlled by state or local public-school authorities. The committee would suggest the proposition that it is desirable that each state report shall cover all essential particulars of the varied educational activities within the state. Among the features not reported uniformly by all states are:

A. Private elementary schools.
B. Academies, seminaries, and other private secondary schools.

C. Colleges other than state universities and land-grant colleges.

D. Schools for defectives and delinquents.

E. General educational movements, as, for example, public playgrounds, school hygiene, etc.

The committee suggests that the use of the state report as a clearing-house of educational information would simplify the task of gathering information on the condition and progress of education among the states and that reasonable uniformity of treatment would simplify the interpretation of the facts reported. As a basis for such uniformity the committee suggests the adoption by the states of the general form of report adopted by the Bureau of Education.

The recommendations of the committee with regard to the type of record to be kept become significant only in proportion to the use which can be made of the statistics gathered in the organization and administration of our schools. The discussion and illustrations which follow furnish the best argument which can be made for the adoption of more adequate records and reports.

USE OF STATISTICS IN SCHOOL ADMINISTRATION

FACTS VERSUS OPINION

When the school was small, consisting of one or two teachers, or at most of one or two buildings, definite knowledge with reference to school needs and the work done was easily acquired. With the development of school systems involving expenditure of millions of dollars, comprising thousands of teachers and hundreds of thousands of pupils, direct knowledge of what should be done, and of what is being done, is rendered more or less impossible, yet the necessity of positive knowledge of actual school needs and conditions is imperative.

Teaching is at best only becoming a profession. Perhaps in no other line of activity do custom and tradition play such a prominent part. The same activities are carried on today because they were carried on yesterday. The same emphasis is given a study now because this was the emphasis formerly given. The same topics are taught in the subject because these were previously taught. In a word, we are just beginning to study the reasons for this and that activity, and for doing this and that type of school work.

At best, theories of education are difficult to define and to determine. Our attitude toward foreign languages, toward science, toward formal grammar, toward the time and place given to arithmetic, our ideas of where to begin the teaching of formal spelling, or of writing, or of geography, rest not upon facts, but very largely upon opinions—opinions which in turn are determined to a large extent by education and temperament.

Not only in the work of administration are our larger policies a reflection, to a greater or less extent, of personal bias, but even in the smaller matters, if they may be so called, the personal point of view dominates

to a considerable extent. We arbitrarily assume that our children profit by the study of Latin, by the study of science; we arbitrarily assume that the high school is doing all that it should for its pupils; we arbitrarily assume that pupils are efficient in reading; that this style and type of writing is preferable; that our children are good or poor in spelling; that the work in history and geography is effective; we arbitrarily assume that proper emphasis is placed upon each of the studies, and these given their time-value and proper emphasis in the advancement of children through the school. Seldom indeed in the past have school men measured by any definite criteria, or proved by systematic investigation, any of the above assumptions.

If the administration of the public school is to be elevated above the plane of personal opinion, if our theories are to be given foundation in fact, if our assumptions with reference to lines of work, methods of instruction, mastery of subject-matter, and skill in manipulation are to be displaced by positive knowledge, data must be collected with reference to actual social conditions, with reference to the effect upon children of certain lines of instruction, and with reference to the effectiveness of given methods of teaching. In a word, if school administration is to be rescued from the dominion of tradition and personal bias, systematic and scientific study must be made of school methods, and of school results. For only as *facts* take the place of *opinion*, *assumption* gives way to *definite knowledge*, mere *personal point of view* yields to *established principles*, will the administration of our schools be placed upon a firm footing, and education be made scientific and professional.

DETERMINING THE WORK OF THE SCHOOL

The annual reports of given school systems may show an increase in the number of children receiving their education at public expense. Yet in centers of rapidly increasing population the school registration may be increasing and still the public school be losing ground. The basis of determining whether a given system is reaching a larger and larger proportion of children of school age, or of determining what part of its whole task a given school is doing, lies not in the enrollment, but in the relation this enrollment bears to the total school population.

To know the whole work of the school, it is therefore necessary to secure an accurate school census by ages. A comparison of this data with the total enrollment in public, private, and parochial schools will reveal the part of the whole work which is not being covered by any school, also the part of the whole work being done by the public school.

Table I shows the school census by ages of the city of Cleveland for 1908–1909, the number enrolled in public, private, and parochial schools, the number in no school, and the percentage of all the children of the city in the public school:

TABLE I

	Ages													
	6	7	8	9	10	11	12	13	14	15	16	17	18	Totals
School enumeration 1909.....	10,295	9,255	9,552	8,917	9,197	8,572	9,769	8,859	8,606	8,017	8,064	8,064	8,225	115,954
Number in private and parochial schools 1908–9.....	1,804	2,328	2,762	2,654	2,842	2,721	3,203	2,722	1,860	1,035	675	452	397	25,455
Number in public schools 1908–9.....	8,706	6,154	6,891	6,723	6,758	6,358	6,772	6,455	4,531	2,505	1,611	935	390	64,789
Number in public, private, and parochial schools 1908–9	10,510	8,482	9,653	9,377	9,600	9,079	9,975	9,177	6,391	3,540	2,286	1,387	787	90,244
Number in no school 1908–9..	—215	773	—101	—460	—403	—507	—206	—318	2,215	4,477	6,340	6,677	7,438	25,710
Percentage in public schools 1908–9.....	84.56	66.49	72.14	75.4	73.48	74.17	69.32	72.86	52.65	31.24	18.67	11.59	4.74	55.88

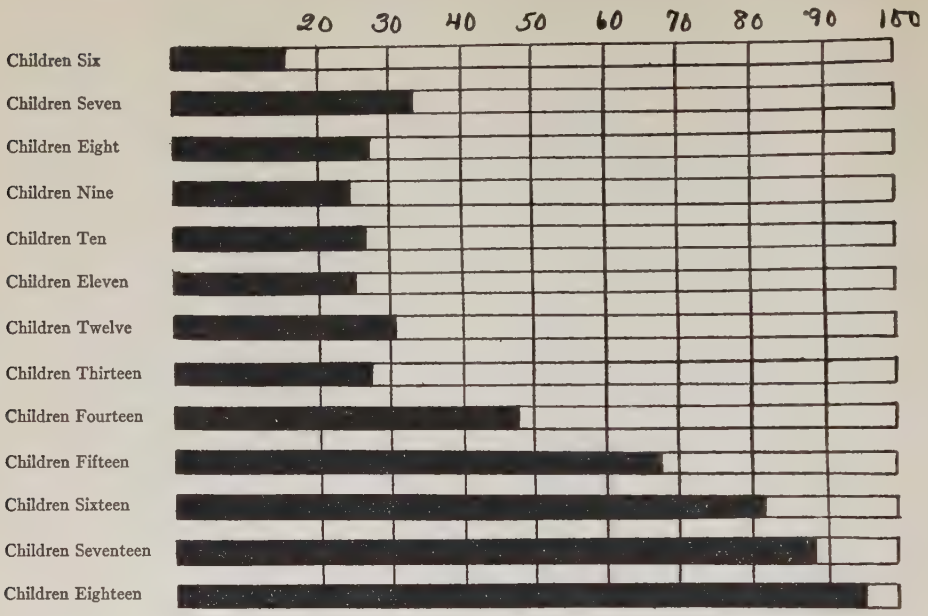


FIG. 1.—Black shows percentage of all the children of Cleveland of each age from six to eighteen not attending the public school in 1908–9.

DETERMINING WHERE THE SCHOOL BREAKS DOWN

In the administration of the public school, new problems have arisen within the last few years, and new standards of efficiency have been raised. The most important of these new problems is the one of educational waste.

The work of the school up to the present time has been judged in large measure by the number of its graduates and by their intellectual attainments. Little or no account has been taken of the number that withdrew before reaching the sixth grade, to say nothing of those dropping out before completing the elementary or high-school course. In a word, the problem of withdrawals has been ignored. The public school ought to be so attractive and so effective that once a child enters he will continue until he has at least finished the elementary course. We are, however, at present far from attaining this degree of efficiency. But to what extent we are failing to hold our children cannot be known until definite data are collected with reference to withdrawals; moreover the public school has not done its full duty by the child until the causes of withdrawal are ascertained, and those lying within the school eradicated.

Again, the public school ought to be so organized that the child entering at the age of six will be able to complete his elementary education by the end of his fourteenth year, and his high-school education by the close of

the eighteenth. To measure the efficiency of the school in this respect, it is necessary to know the number of retarded children. *By a retarded child we mean one behind his grade for his age.* So to order our records that the degree of retardation and the causes may be known, and that by the proper use of these data children may be advanced thru the school on time, is one of the pressing problems of the day.

The elementary school is divided into eight grades and the high school into four, each representing a unit of work which supposedly is to be covered by the child in one school year. *When a child fails to do the work in a given period, he is compelled to go over it a second time, and becomes thereby a repeater.* The school, as it is now, is far from being able to carry the child thru its twelve units of work in twelve years. That school is, however, the most efficient—taking just standards of attainment into consideration—which has the fewest repeaters, and it should be the conscious endeavor of every system to ascertain the number of repeaters and the causes, and to reduce repetition to a minimum.

Just as the outcome of repetition is retardation, so the direct cause of repetition is non-promotion. *That is, children fail to be advanced from one division to the next higher, or from the highest division of one grade to the lowest of the next grade.* Non-promotion results of course from failure in studies. To reduce retardation, it is therefore necessary to know the number and causes of non-promotion and the studies and the grade in which children fail, to the end that external factors, such as physical defects and irregular attendance, may be eradicated, and that materials in the studies of the school may be better adapted to the age and capacity of pupils, or the requirements in these studies lessened.

If, therefore, the problems of educational waste as measured by withdrawals, retardation, and repetition are to be squarely faced, and the efficiency of the school in these respects increased, there is imperative need of the collection and the use of data in making the schools more attractive, in adjusting its requirements to the abilities of children, and adapting its course of instruction to their needs.

The following tables upon withdrawals and causes, upon retardation, upon repetition, and upon non-promotion and causes, collected with reference to the Cleveland public schools, are typical of data that must be collected and used in meeting the above problems.

Table II shows, for each of the last ten eighth-grade classes of all elementary schools, the total number of pupils enrolled in the first grade, the number of these reaching the second, the third, and so on to the eighth grade; it shows also the percentage of the total enrolled in the first grade advancing to each higher grade, and the percentage of the total withdrawing by the end of each grade:

TABLE II

Year Entered	Grades Elementary School								Year in 8th Grade
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	
1892–3	9,341	7,123	7,185	6,853	5,789	4,637	3,512	2,555	1899–1900
1893–4	9,422	7,103	7,061	7,120	5,875	4,640	3,548	2,472	1900–1
1894–5	9,976	7,527	7,339	7,267	5,957	4,849	3,583	2,519	1901–2
1895–6	10,830	7,908	7,851	7,751	6,454	5,278	3,837	2,708	1902–3
1896–7	11,720	8,074	7,908	7,782	6,522	5,108	3,893	2,820	1903–4
1897–8	12,257	8,129	8,164	8,108	6,671	5,511	4,312	3,222	1904–5
1898–9	12,442	8,581	8,581	8,357	6,900	6,051	4,568	3,515	1905–6
1899–00	12,561	8,653	8,763	8,952	7,424	6,178	4,567	3,245	1906–7
1900–1	12,619	8,558	8,838	9,256	7,645	6,362	4,592	3,254	1907–8
1901–2	12,860	9,094	9,352	8,914	7,860	6,389	4,974	3,709	1908–9
Totals	114,028	80,750	81,360	80,360	67,097	55,003	41,368	30,019	
*		70.81	71.07	70.47	58.84	48.23	36.29	26.32	
†		29.19	28.93	29.53	41.16	51.77	63.71	73.68	

* Percentage of enrollment in first grade advancing into each grade.

† Percentage of enrollment in first grade withdrawing by end of each grade.

The data here used are taken from the official records of the Board of Education. The percentage of withdrawals is, however, without doubt, too high, due to the treatment in past years of first-grade pupils and to including transfers.

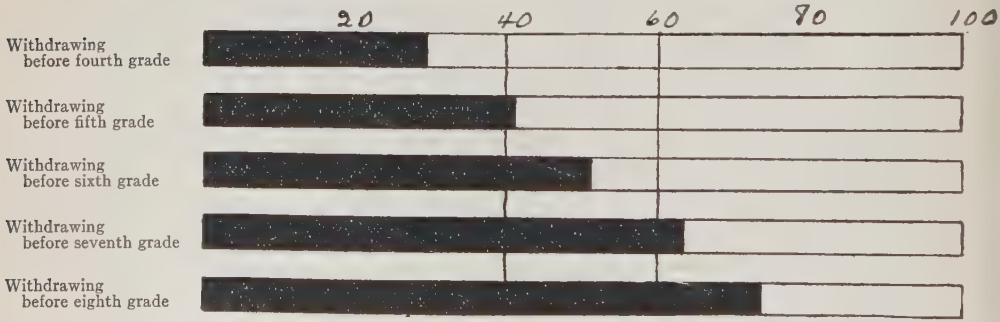


Fig. 2.—Black shows percentage of all children enrolled in the first grade of the elementary schools of Cleveland for the ten years between 1892–93 and 1901–2 withdrawing before reaching the fourth, fifth, sixth, seventh, and eighth grades.

Table III shows the number of withdrawals in 1909–10 in each grade of the elementary and in each class of the high school, the whole number of withdrawals in each school, and the total in all; it shows the enrollment and percentage of withdrawals on enrollment for each grade and class, also the enrollment of the elementary and the high school, the percentage of withdrawals in each, and the percentage of withdrawals on enrollment in both the elementary and the high school.

TABLE III

	Elementary School									High School					Total Both Schools
	Grades									Classes					
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total	First	Second	Third	Fourth	Total	
Withdrawals	260	81	65	168	329	451	444	234	2,032	432	232	107	57	828	2,860
Enrollment	12,597	9,960	8,752	8,222	7,223	6,120	4,924	3,870	61,668	2,630	1,454	1,033	879	5,996	67,664
Percentage of withdrawals each grade and class	2.06	.81	.74	2.04	4.55	7.36	9.01	6.04	3.29	16.42	15.95	10.35	6.48	13.80	4.22

Table IV shows the causes of withdrawal from the elementary and high school, the number withdrawing in 1909–10 for each cause in each school; the percentage of all withdrawals in each school due to each cause; it also shows the number of withdrawals in both schools due to each cause, and the percentage of all withdrawals in both schools due to each cause.

TABLE IV

	Withdrawals Elementary School	Percentage All Withdrawals Elementary School	Withdrawals High School	Percentage All Withdrawals High School	Number Withdrawals Both Elementary and High School	Percentage All Withdrawals Both Elementary and High School
Financial condition of home	114	5.61	28	3.38	142	4.96
Illness in family	76	3.74	40	4.83	116	4.05
Personal illness	309	15.20	159	19.20	468	16.36
Physical defects	30	1.47	5	.60	35	1.22
Incapacity	49	2.41	39	4.71	88	3.07
Indifference	59	2.90	155	18.71	214	7.48
Failing promotion	3	.14	3	.36	6	.20
Left city	224	11.02	30	3.62	254	8.88
Going to work	1,122	55.21	332	40.09	1,454	50.83
Other causes	46	2.26	37	4.46	83	2.90
Total	2,032		828		2,860	

Table V shows the normal age for completing each grade of the elementary school, the number of children in 1909–10 in each grade behind one, two, three, four and more years, the total retarded in each grade, the enrollment in each grade, the percentage of retardation in each grade, and the percentage of total enrollment retarded; it also shows the total retarded one, two, three, four and more years, and the percentage of all retarded back one, two, three, four and more years.

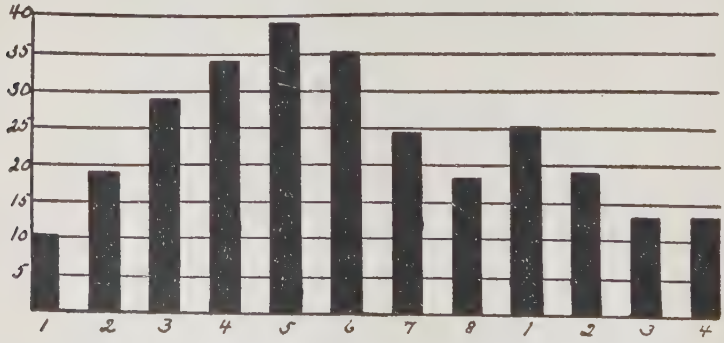


FIG. 3.—Black shows percentage of all children enrolled in each grade of the elementary and high schools of Cleveland in 1909–10 retarded one, two, three, or four and more years. Numbers indicate grade of elementary and class of high school.

The normal ages given in Table V for completing the work of a particular grade differ from the ages given by certain writers, notably Dr. Thorn-

TABLE V

	Elementary School*									
	Grades									
	First Normal Age 6–7	Second Normal Age 7–8	Third Normal Age 8–9	Fourth Normal Age 9–10	Fifth Normal Age 10–11	Sixth Normal Age 11–12	Seventh Normal Age 12–13	Eighth Normal Age 13–14	Total	Percentage of All Retardation
Retarded one year	804	1,188	1,367	1,428	1,523	1,456	922	590	9,278	59.33
Retarded two years	271	432	612	781	934	579	260	106	3,975	25.42
Retarded three years	106	155	317	428	318	124	35	10	1,493	9.54
Retarded four years and more	167	150	270	204	69	21	5	5	891	5.69
Total retarded	1,348	1,925	2,566	2,841	2,844	2,180	1,222	711	15,637	
Enrollment each grade	12,597	9,960	8,752	8,222	7,223	6,120	4,924	3,870	61,668	
Percentage each grade of total retarded	10.70	19.32	29.31	34.55	39.37	35.62	24.81	18.37	25.35	

* Exclusive of all special schools.

† The age of a child is determined with reference to the last birthday previous to opening school in September.

TABLE VI

	Elementary School*									High School					Grand Total
	Grades									Classes					
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total	First	Second	Third	Fourth	Total	
Non-Promotions	2,172	1,014	702	785	741	638	554	140	6,746	154	132	98	58	442	7,188
Enrollment	12,597	9,960	8,752	8,222	7,223	6,120	4,924	3,870	61,668	2,630	1,454	1,033	879	5,996	67,664
Per cent of Non-Promotions	17.24	10.18	8.02	9.54	10.26	10.42	11.25	3.62	10.94	5.85	9.07	9.48	6.59	7.37	10.62

* Exclusive of all special schools.

dyke and Dr. Ayres. The normal ages according to Dr. Ayres are as follows:

First Grade	6 to 8 years
Second Grade	7 to 9 years
Third Grade	8 to 10 years
Fourth Grade	9 to 11 years
Fifth Grade	10 to 12 years
Sixth Grade	11 to 13 years
Seventh Grade	12 to 14 years
Eighth Grade	13 to 15 years

Table VI shows the number of non-promotions in each grade of the elementary and in each class of the high school, the enrollment and percentage of non-promotions in each grade and class; it also shows the total number of non-promotions, the enrollment, and the percentage of the enrollment non-promoted for the elementary and the high school; also the same for both taken together.

Table VII shows the causes of non-promotion in the elementary and high school, the number non-promoted in 1909–10 for each cause in each school, the percentage of non-promotions in each school due to each cause; it also shows the number of non-promotions in both schools due to each cause, and the percentage of non-promotions in both schools due to each cause.

TABLE VII

	Elementary School		High School		Elementary and High School	
	Number Non-Promotions	Percentage All Non-Promotions	Number Non-Promotions	Percentage All Non-Promotions	Number Non-Promotions	Percentage All Non-Promotions
Irregular attendance	1,416	20.99	55	12.44	1,471	20.46
Physical defects	375	5.56	7	1.59	382	5.31
Personal illness	128	1.90	42	9.50	170	2.37
Incapacity	3,922	58.14	129	29.19	4,051	56.36
Indifference	733	10.86	159	35.97	892	12.41
Outside work			37	8.37	37	.52
Other causes	172	2.55	13	2.94	185	2.57
Total	6,746		442		7,188	

Table VIII shows the amount of repetition in the elementary and high school for the year 1909–10.

ADJUSTING THE SCHOOL TO ITS WORK

The school exists for the accomplishment of definite results. The social conditions determining the ends and purposes of the school undergo change. These changes necessitate corresponding adjustments of the school to its work.

DETERMINING THE LENGTH OF SCHOOL YEAR

The opportunity which a municipality offers to its youth to gain an education within a reasonable period of time, is determined in part by the

TABLE VIII

	Elementary School*									High School					Grand Total
	Grades									Classes					
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total	First	Second	Third	Fourth	Total	
Repeaters in each grade and class	2,443	1,192	1,026	879	606	323	162	39	6,670	143	128	39	43	353	7,023
Enrollment in each grade and class	12,97	9,960	8,752	8,222	7,222	6,120	4,924	3,870	61,668	2,630	1,454	1,033	879	5,996	67,664
Percentage of repeaters in each grade and class	19.39	11.97	11.72	10.69	8.39	5.27	3.29	1.01	10.81	5.43	8.80	3.77	4.89	5.88	10.38

* Exclusive of all special schools.

length of the school year. Without data for measuring the efficiency of a school system in all its various aspects, manifestly the determination of the length of the school year is a mere matter of opinion, but with complete data showing the efficiency of the school with respect to its holding power, with respect to its ability to carry pupils through the several grades of the school on time, and with respect to the number of non-promoted children and their intelligence and skill in the various branches of study, the length of the school year may be fixed intelligently and with reference to social conditions and the needs of the children. Whether or not a summer term for non-promoted and retarded pupils is needed in a school system may also be decided in view of data showing the number of such children. Such data are supplied by the above and following tables.

DETERMINING STUDY-GRADES AND STUDY-VALUES

One of the most important problems in connection with education is to settle in what grades of the elementary school and years of the high

TABLE IX

	No. Teaching	Grade in Which Each Is Taught and Number Teaching in Respective Grade							
		I	II	III	IV	V	VI	VII	VIII
1 Reading	50	50	50	50	50	50	50	50	50
2 Spelling	50	40	47	50	50	50	50	50	50
3 Grammar	38		1	3	5	14	25	34	35
4 Language and composition	50	46	46	47	50	50	50	48	48
5 Writing	50	48	50	50	50	50	50	46	43
6 Arithmetic	50	35	46	50	50	50	50	50	50
7 Algebra	19							2	19
8 Geometry	3							1	3
9 Geography	50	4	9	32	50	50	50	46	32
10 History	50	8	9	11	17	31	39	48	50
11 Civics	18							6	18
12 Music	50	50	50	50	50	50	50	50	50
13 Drawing	50	50	50	50	50	50	50	50	50
14 Manual training	41	21	21	21	20	22	28	35	35
15 Cooking	32					1	2	28	28
16 Sewing	41			5	13	29	37	27	13
17 Physical training	46	46	46	46	46	46	46	43	43
18 Physiology	46	21	22	23	30	36	35	38	40
19 Hygiene	44	35	36	38	38	43	41	40	38
20 Elementary science	30	24	24	24	24	25	25	25	26
21 Bookkeeping	5								5
22 Typewriting	1							1	1

school given studies shall be taught, and to fix upon the time-value of these studies in particular grades and years. Thus far tradition and personal opinion have been large factors in determining in what grades a study appears and the amount of time given to it. There is great need of intelligent data along these lines that administrative action may be based on facts and freed from personal bias.

Table IX shows the branches included in the elementary courses of study of fifty of the largest cities of the United States, the number teaching each branch; also the grades in which each is taught and the number teaching the given subject in the respective grade.

Table X shows the average time in minutes per week devoted to each study in each grade in the schools of the following cities: Boston, New York, Philadelphia, Rochester, Cleveland, Cincinnati, Indianapolis, St. Louis, Chicago, Milwaukee, and San Francisco.

TABLE X

	Grades Elementary School							
	I	II	III	IV	V	VI	VII	VIII
Reading	491	437	341	259	213	206	186	189
Spelling	84	100	92	84	85	82	67	62
Grammar							123	134
Language and composition	131	143	156	164	191	187	151	155
Arithmetic	120	169	189	205	208	216	220	220
Writing	82	91	85	81	75	75	60	53
History				45	100	117	101	140
Geography			110	139	150	153	114	110
Music	71	69	68	66	73	66	65	65
Drawing	134	126	130	130	84	85	81	81
Manual Training					73	71	105	103

STANDARDIZING REQUIREMENTS IN STUDIES AND DEPARTMENTS

Notwithstanding the value of studies is fixed by the time alloted in the daily program, study-requirements seemingly have little relation to the value ascribed. Reading, for example, was given in 1909–10, 25.82 per cent of the total time of our elementary school, spelling 5.99 per cent, arithmetic 16.55 per cent, and geography and history combined 9.45 per cent, while in the first year of the high school Latin, English, algebra, and natural history were ascribed like value. Nevertheless, the failures in arithmetic were one-third greater than in reading, and those in geography and history combined, tho the two studies were assigned but one-third of the time, were threefold larger than in reading, whereas in the high school, 26 per cent of the children dropped out or failed in Latin, 15.9 per cent in English, 30.4 per cent in algebra, and 22 per cent in natural history. Such variations reveal a need of standardizing the requirements in studies as well as in departments. Standards for completing a study of great

TABLE XI

	Total Enrollment	Elementary School									Percentage of Failures on Enrollment
		Failures by Grades									
		First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total by Studies	
		Number Failing	Number Failing	Number Failing	Number Failing	Number Failing	Number Failing	Number Failing	Number Failing		
Spelling	61,668	204	623	580	294	236	117	54	25	2,133	3.45
Reading	61,668	2,018	780	478	219	134	88	67	11	3,795	6.15
Writing	61,668	517	384	294	202	149	108	74	16	1,744	2.82
Arithmetic	61,668	677	1,071	869	953	932	750	493	92	5,837	9.46
Geography (4–8 grades)	30,359				1,213	849	718	11	3	2,794	9.20
Grammar (6–8 grades)	14,914				4	102	482	542	176	1,306	8.75
Language	46,754	660	472	669	510	442	116		2	2,871	6.14
U.S. History (7–8 grades)	8,794						2	600	215	817	9.29
German (4–8 grades)	15,876				77	89	55	75	27	323	2.03
Total		4,076	3,330	2,890	3,472	2,933	2,436	1,916	567	21,620	

value should be such as to actually put the emphasis on that study rather than that the pressure on one study, when measured by the time allotted, should be two to twenty times as great as upon another.

Table XI shows the fundamental studies in our elementary school, the enrollment and the failures in each by grades for 1909–10.

Table XII gives the enrollment in first-year Latin, English, algebra, and natural history, the number dropping out and failing in each high-school class for 1909–10.

TABLE XII

	Number Enrolled in the Study	Number Dropping Study	Number Remaining	Failures of Number Remaining to End of Year	Total Failing and Dropping Study	Percentage Failures of Those Remaining to End of Year	Percentage of Total Failures and Dropping Study
Latin	1,302	234	1,068	115	349	10.76	26.80
English	1,528	192	1,336	51	243	3.81	15.90
Algebra	1,671	269	1,402	239	508	17.04	30.40
Natural history	76	15	61	2	17	3.27	22.36

STANDARDIZING INDIVIDUAL SCHOOLS

A school, like an individual, acquires a reputation. One is reputed as being good, another poor. Quite often such opinions have no reality in fact, and the school reputed poor is in truth a good school, and vice versa. There is also wide variation in the standards of the different schools of the same system. For example, in one the failures in arithmetic mount to as high as 25 per cent; in another, doing the same work, there are none. In our high school, those failing and dropping out of first-year Latin in 1909–10 range from 26 to 41 per cent of the enrollment, in algebra from 26 to 46 per cent, in geometry (second-year study) from 23 to 45 per cent. Such variations in standards in a single system are scarcely to be countenanced. That schools should be rightly judged with regard to their work, and that there should be reasonable uniformity in the requirements of different schools of the same system, there can be little doubt. Yet, before this can be done, data must be collected with reference to the failures in different schools; upon these city-wide standards fixed, and the requirements of individual schools equalized and their work judged.

DETERMINING MODE AND METHOD OF PROMOTION

No one factor penetrates so deeply into the life of the school as method of promotion. For this involves standards of attainment and modes of advancing children from grade to grade as well as from school to school.

From a promiscuous method of promotion, prevailing even now in country districts, there has been advance to annual promotions. Certain large cities have, however, of late broken away from the annual plan and adopted semi-annual promotions. A further step is now being advocated, that children be advanced at the end of each term of twelve or thirteen weeks. Such a plan, it is argued, will go far toward reducing repetition and retardation.

To a very considerable extent plans of promotion have been determined in view of the easy organization and administration of the school, and in view of the pleasure of the teacher. Whether the given plan conserved the best interests of the child and permitted him without undue hindrance to advance thru the school on time, has been little considered. The time, however, is at hand, when the efficiency of modes of promotion must be measured in view of effect upon educational waste; and a promotion plan devised which will enable children as a rule to complete the elementary-school course on the average in eight years, and the high-school course in four. Such a plan must rest upon a careful study of withdrawals, retardation, and non-promotions. It must be so flexible that each child shall be permitted to advance thru school according to his ability. It must permit the bright child to advance in less than the average required time; and even tho the slow child may take longer, the average, when all the children passing thru the school are taken into account, should not be more than eight years for the elementary, and four years for the high school.

Data which may be used in measuring efficiency of old methods, and devising new methods of promotion, are found in the above tables.

DETERMINING AND EQUALIZING SCHOOL EXPENDITURE

The growing diversity in public instruction and the increased cost of education renders increasingly difficult the administration of our schools. The increasing cost of education makes necessary more detailed knowledge of the results derived and more detailed knowledge of the cost of each type of school work, and of the different lines of instruction, to the end that there may be a better weighing of needs and a more careful determination of educational values in the expenditures of public money. For in the development of our schools activity after activity has been added with the assumption that the money to carry each forward would be forthcoming. The day is, however, even now here when the claims of each separate activity must be set over against those of every other, and each line of work supported and advanced according to its worth in relation to all the other interests of the school.

Table XIV shows the cost of instruction, the enrollment, and per capita cost of instruction in each type of school in the city of Cleveland for the year 1909–10.

TABLE XIV

	Cost of Instruction	Enrollment	Per Capita Cost of Instruction
Normal	$ 18,470.00	205	$ 90.09
High schools	395,360.45	5,996	66.27
Academic High School	288,103.72	4,436	64.94
Technical High School	71,569.60	1,102	64.94
High School of Commerce	37,687.13	458	82.28
Elementary schools	1,344,926.17	63,164	21.29
Regular Elementary	1,298,977.60	61,668	21.06
Special Elementary	45,984.57	1,496	30.71
Backward School	8,224.64	328	25.07
School for Blind	824.25	12	68.68
Boys' School	9,040.99	657	13.76
School for Cripples	650.65	13	50.05
School for Deaf	9,954.39	97	102.62
Elementary Industrial	6,631.24	152	43.62
Special Schools	10,622.41	237	44.82
Kindergarten	69,598.22	5,537	12.56
Evening schools	27,092.50	6,673	4.06
Evening High Schools	13,617.00	2,065	6.59
Evening Elementary Schools	13,475.50	4,608	2.92
Summer schools	9,226.79	3,968	2.32
Summer High School	1,008.75	258	3.90
Summer Elementary School	6,929.39	2,431	2.85
Grammar School	4,338.75	1,027	4.22
Primary School	2,114.39	1,133	1.86
Manual Training School	288.75	131	2.20
Boys' School	187.50	140	1.33
Kindergarten	996.32	536	1.85
Playgrounds	292.33	743	.39

MEASURING PROGRESS AND DEVELOPMENT

Under present conditions it is no longer sufficient for administrative purposes to know the total enrollment in all schools of a system, the total number of teachers, and the total expenditure for a given year. Furthermore, it is not sufficient for purposes of publicity, or for administration, merely to report year by year the facts about the teaching force, about the enrollment, and expenditure for instruction. Nor to report year by year the facts about the number of pupils per teacher, the per capita cost of instruction in different types of schools, or to report the facts about retardation, withdrawals, non-promotions, failures in studies, number going to high school and to college, or the time taken on the average to complete the course of a given school. *There is need that these separate facts for each year be correlated, and those for a series of years be brought together and so arranged as to bring to view the movements and developments both within the system as a whole, and within each separate type of school.* Only in some such way can a correct idea of growth and progress be acquired sufficiently definite for administrative purposes.

The following tables are illustrative of such data:

Table XV shows cost of instruction—that is, amount paid for salaries of supervisors, principals, and teachers in all schools and in each type of

TABLE XV

	1905–1906		1906–1907		1907–1908		1908–1909		1909–1910		Percentage of Increase 1910 over 1906
	Total for Instruction	Percentage of Total to Each School	Total for Instruction	Percentage of Total to Each School	Total for Instruction	Percentage of Total to Each School	Total for Instruction	Percentage of Total to Each School	Total for Instruction	Percentage of Total to Each School	
Total cost of instruction	1,463,904.81	.....	1,582,773.56	.....	1,662,678.03	.....	1,799,615.86	.....	¶1,919,209.59	.....	31.10
Office supervision	45,829.85	3.13	50,200.06	3 .17	49,249.68	2.96	52,599.76	2.92	52,535.40	2.73	14.63
Superintendent	7,520.12	.....	5,650.43	.....	6,000.00	.....	6,000.00	.....	6,000.00	.....	.....
Assistant superintendents	5,659.97	.....	5,750.00	.....	6,000.00	.....	10,000.00	.....	9,999.84	.....	.....
General supervision	8,100.00	.....	8,500.00	.....	8,500.00	.....	8,700.00	.....	6,145.46	.....	.....
Kindergarten supervision	1,399.92	.....	1,399.92	.....	1,500.00	.....	1,500.00	.....	‡‡2,499.84	.....	.....
German supervision	2,500.00	.....	2,500.00	.....	2,500.00	.....	2,500.00	.....	1,999.92	.....	.....
Penmanship supervision	3,050.00	.....	4,200.00	.....	4,300.00	.....	4,300.00	.....	4,116.28	.....	.....
Music supervision	2,800.00	.....	2,800.00	.....	4,100.00	.....	4,100.00	.....	5,059.68	.....	.....
Drawing supervision	2,200.00	.....	5,800.00	.....	5,500.00	.....	5,800.00	.....	6,619.68	.....	.....
Manual training supervision	4,299.84	.....	4,099.69	.....	4,699.68	.....	4,799.76	.....	4,799.76	.....	.....
Physical training supervision	8,300.00	.....	9,500.00	.....	6,150.00	.....	4,900.00	.....	5,295.00	.....	.....
Normal school	*15,600.00	1.06	*15,742.10	.99	*16,700.00	1.00	*15,436.86	.85	*18,470.00	.96	18.39
High schools	†276,443.20	18.88	†287,401.52	18.15	†305,666,18	18.38	†359,067.60	19.95	†397,360.45	20.70	43.74
Academic high schools	276,443.20	18.88	287,401.52	18.15	302,666.18	18.20	304,090.54	16.89	288,102.72	15.01	4.21
Regular instruction	241,272.24	16.48	248,914.77	15.72	262,125.50	15.76	262,517.74	14.58	247,355.72	12.88	2.52
Special instruction	35,170.96	2.40	38,486.75	2.43	40,540.68	2.43	41,572.80	2.31	40,748.00	2.12	15.85
Music	1,700.00		1.800.00		2,600.00		2,700.00		3,200.00		
Drawing	8,000.00	.....	8,900.00	.....	7,500.00	.....	10,700.00	.....	12,168.00	.....	.....
Manual training	18,120.95	.....	20,436.75	.....	22,890.68	.....	20,272.80	.....	17,200.00	.....	.....
Physical training	7,350.00	.....	7,350.00	.....	7,550.00	.....	7,900.00	.....	8,180.00	.....	.....
Technical High School	.....	.....	.....	.....	3,000.00	.....	††53,209.32	.....	¶¶71,569.60	.....	.....
High School of Commerce	.....	.....	.....	.....	.....	.....	1,767.74	.....	|| 37,687.13	.....	..
Elementary schools	‡1,065,354.18	72.77	‡1,152,584.48	72.89	§1,208,266.99	72.66	‡1,273,144.36	70.74	‡1,244,926.17	70.07	26.24
Regular elementary schools	§1,049,276.31	71.67	§1,131,183.11	71.42	‡1,184,313.26	71.22	§1,245,217.32	69.19	1,298,977.60	67.68	23.79
Regular instruction	1,040,445.82	71.07	1,121,067.61	70.83	1,172,134.47	70.49	1,228,980.12	68.29	1,207,199.71	62.90	16.02
Special instruction	**8,830.49	.60	**10,115.50	.63	**12,278.79	.73	**16,237.20	.90	91,777.89	4.78	.....
German	.....	.....	.....	.....	.....	.....	.....	.....	71,583.44	.....	.....
Manual train. & cooking	8,830.49	.....	10,115.50	.....	12,278.79	.....	16,237.20	.....	20,194.45	.....	.....
Special elementary schools	16,077.87	1.09	21,401.37	1.37	32,953.73	1.44	27,927.04	1.55	45,948.57	2.39	185.78
School for Deaf	5,479.02	.....	7,096.53	.....	7,440.31	.....	8,699.81	.....	9,954.39	.....	.....
School for the Blind	.....	.....	.....	.....	.....	.....	.....	.....	824.25	.....	.....
Boys' School	4,419.50	.....	5,679.22	.....	6,616.11	.....	8,751.92	.....	9,040.99	.....	.....
Special Schools	6,179.35	.....	8,625.62	.....	9,488.09	.....	9,928.31	.....	10,622.41	.....	.....
Elementary Industrial	.....	.....	.....	.....	.....	.....	.....	.....	6,631.24	.....	.....
Backward Schools	.....	.....	.....	.....	.....	.....	.....	.....	8,224.64	.....	.....
School for Cripples	.....	.....	.....	.....	409.22	.....	550.00	.....	650.65	.....	.....
Kindergarten	44,941.32	3.06	54,040.61	3.41	53,008.85	3.18	63,811.96	3.54	69,598 22	3.62	54.86
Evening schools	11,077.00	.75	15,362.50	.97	19,755.00	1.18	23,828.75	1.32	§§27,092.50	1.40	144.58
Evening High School	3,745.00	.....	5,672.50	.....	7,506.00	.....	10,884.75	.....	13,617.00	.....	.....
Evening Elementary School	7,332.00	.....	9,690.00	.....	12,249.00	.....	12,944.00	.....	§§13,475.50	.....	.....
Summer schools	4,659.26	.31	7,442.29	.47	10,031.33	.60	11,726.57	.65	9,326.79	.47	98.03
Summer High School	1,050.00	.....	1,045.00	.....	1,050.00	.....	1,050.00	.....	1,008.75	.....	.....
Summer Elementary School	1,916.13	.....	4,576.40	.....	7,191.26	.....	8,211.17	.....	6,929.39	.....	.....
Grammar School	600.00	.....	2,948.75	.....	4,629.80	.....	5,080.00	.....	4,338.75	.....	.....
Primary School	723.63	.....	1,127.65	.....	1,818.96	.....	2,088.67	.....	2,114.39	.....	.....
Boys' School	150.00	.....	150.00	.....	150.00	.....	150.00	.....	187.50	.....	.....
Manual Training School	442.50	.....	450.00	.....	592.50	.....	892.50	.....	288.75	.....	.....
Kindergarten	853.13	.....	980.89	.....	950.07	.....	1,087.15	.....	996.32	.....	.....
Playgrounds	840.00	.....	840.00	.....	840.00	.....	1,378.25	.....	292.33	.....	.....

* Exclusive of training facilities but inclusive of salary of principal. † Includes salary of principals. ‡ Includes salary of principals. § Includes cost of German instruction and of instruction in backward schools. ** Exclusive of German. †† Exclusive of Summer School. ‡‡ Also first Primary. §§ Exclusive of Summer Elementary Night School, $1,140. ¶ Exclusive of cost of Technical High School and High School of Commerce Summer Term and also cost Summer Elementary Night Schools, $18,296.32. ¶¶ Exclusive of Summer Term, $11,680.20. || Exclusive of Summer Term, $5,476.12.

school for the years 1906–10, the percentage of total spent on each type of school, and percentage of increase in 1910 over that in 1906.

Table XVI shows the enrollment in the regular day elementary school for the years 1901–10, the number of teachers in the regular day elementary school, the number pupils per teacher, the decrease in number pupils per teacher over preceding year, and the percentage of decrease in number pupils per teacher in 1910 over 1901.

TABLE XVI

	Enrollment Regular Day Elementary School*	Teachers in Regular Day Elementary School†	Pupils per Teacher in Regular Day Elementary School	Decrease Over Preceding Year in Number Pupils per Teacher in Regular Day Elementary School	Percentage of Decrease in Number Pupils per Teacher 1910 over 1901
1900–1901	52,051	1121.5	46.41		
1901–1902	52,870	1134.6	46.59	.17 (increase)	
1902–1903	54,118	1223.0	44.25	2.34	
1903–1904	55,430	1232.0	44.99	.74 (increase)	
1904–1905	56,718	1290.0	43.96	1.03	
1905–1906	59,072	1378.0	42.86	1.10	
1906–1907	59,294	1403.0	42.26	.60	
1907–1908	58,967	1471.0	40.08	2.18	
1908–1909	59,285	1514.7	39.13	.95	
1909–1910	61,668	1515.7	40.68	1.55 (increase)	12.34

* Exclusive of transfers and the enrollment of all special schools other than backward schools.

† Includes all teachers in day elementary school except those in Deaf School, Boys' School, special schools (Defective), and School for Cripples.

Table XVII shows cost of instruction in special schools for physically and mentally defective children, the enrollment, per capita cost of instruction, the number of teachers, and the average number of pupils per teacher, for the years 1906–10.

TABLE XVII

	Cost of Instruction Special Schools	Enrollment in Special schools	Per Capita Cost of Instruction Special Schools	Number of Teachers Special Schools	Number Pupils per Teacher Special Schools
1905–6	$ 6,179.35	130	$47.53	8	16.25
1906–7	8,625.62	150	47.53	10	15
1907–8	9,488.09	213	44.54	12	17.75
1908–9	9,928.31	210	47.27	13	16.15
1909–10	10,622.41	237	44.82	13.4	17.68

Special schools were first organized by the Board of Education during the school year of 1904–5.

MEASURING EFFICIENCY OF INSTRUCTION

The present-day school differs from that of two or three generations ago. Old studies have received new content, new studies have been added, and methods of instruction improved; in a word, the spirit and purposes of the school have changed. The reasons for the differences between the school of the present and that of the past not being readily understood,

the present-day school comes in for criticism. It is affirmed that children do not read as well, spell as well, or write as well as in the past, and that they have not the same skill in arithmetic as formerly. Such criticism is, of course, the eternal protest of the old against the new. Yet for school men to go on year after year denying this protest, and affirming that present-day instruction is even better than in the past, will no longer suffice. Public criticism must be met by facts, and the affirmations of school men must rest upon positive knowledge.

One of the means, at least, of testing efficiency of present-day instruction is thru the giving of old examinations. In our system, fortunately, there were ready to hand the questions and the results of examinations given in the schools of Cleveland five and even fifty years ago. The regiving of such tests has, of course, its limitations. Still only as data are collected and presented which are a reasonable measure of efficiency, will the public be made to believe that there is increasing power in the imparting of knowledge, and that the schools of the present are more effective than those of the past.

The following tables are typical of the data that may be collected relative to the efficiency in present-day instruction.

Table XVIII shows the number of children taking the spelling examination of 1858 and the number taking the same examination in 1909, the average number of misspelled words per pupil, and the average percentage of efficiency in both years.

TABLE XVIII

	Pupils Examined	Avg. No. Misspelled Words per Pupil	Avg. Percentage of Efficiency
Examination of 1858....	143	5.215	73.92
Same in 1909.....	3,240	4.307	78.46

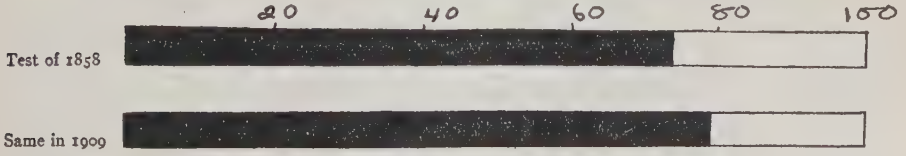


FIG. 4.—Black shows percentage of efficiency for spelling test given in Cleveland schools in 1858, and for same regiven 1909.

Table XIX shows the number of pupils taking the arithmetic examination in 1856 and the number taking the same examination in 1909, the average number of correct answers per pupil, and the average percentage of efficiency for both years.

TABLE XIX

	Pupils Examined	Avg. No. Incorrect Answers per Pupil	Avg. Percentage of Efficiency
Examination of 1856....	162	10.258	48.21
Same in 1909.....	3,081	8.074	59.63

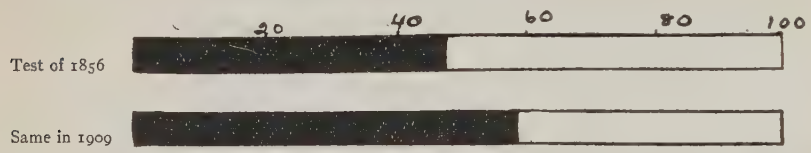


FIG. 5—Black shows percentage of efficiency for arithmetic test given in Cleveland schools 1856, and for same regiven 1909.

ENLIGHTENING THE PUBLIC

Not only are carefully collected and well-organized statistics vital to the judicious administration of the school, but such data serve as the most effective means of enlightening the public with reference to educational needs and conditions. The growing complexity of modern city life militates against parents having to any extent first-hand knowledge of the school. Indeed, the average citizen knows little of the purposes, range of activities, and methods of modern education. *The necessity of systematic effort toward acquainting the public with the problems and needs of the school is now felt on every hand.*

In such a campaign mere assertion, personal opinion, personal bias have little weight. The public only takes seriously those presentations of school needs and conditions which are based upon carefully collected and well-interpreted facts. Only by the use of such data, set forth by means of tables, colored circles, curves, black-line graphs, or other graphic representations, can the people be made acquainted with the whole work of the school, be made to realize where the school breaks down, be brought to understand the necessity of certain adjustments within the school, be brought to appreciate the propriety of expending such large sums of public money upon education. *Only by these means can the public be convinced that the modern school, despite its wide range of instruction and activities, is more effective than the school of the past, and is seeking as never before to serve all the children and all the people of the community.*

(*Signed*) PAYSON SMITH, *Chairman*
GEORGE D. STRAYER, *Secretary*
WILLIAM H. ELSON
E. C. WARRINER
CHAS. M. LAMPREY

ROUND TABLES

ROUND TABLE OF STATE AND COUNTY SUPERINTENDENTS

TOPIC: A STORY OF ACHIEVEMENT AND ENDEAVOR IN CO-OPERATION

THE COUNTY SUPERINTENDENT AND THE RURAL COMMUNITIES

EDITH A. LATHROP, COUNTY SUPERINTENDENT OF CLAY COUNTY, CLAY CENTER, NEBR.

Authors of modern education agree that there is very little of *real* supervision among rural schools, and that the county superintendent is underpaid, unskilled, and inefficient.

Since these statements are true to a great degree, one might believe that the county superintendent has no story of achievement. Yet there is at work a little leaven which in some states has made statutory provisions for a deputy, thus making it possible for the county supervisor to promote things educational. Again, school people are universally becoming agreed that the office of county superintendent must be taken out of politics, and that there must be a higher standard of qualifications. Some states make provision that a non-partisan board shall appoint the county superintendent, and even in the states where politics yet enter into the election, the spirit of the hour is to evade party lines in the choice of this officer. The last decade has called more county superintendents to the educational platform and to larger fields of labor in higher institutions of learning than ever before. This means that there is beginning to be an educational future for the rural-school supervisor. Why should it not be possible for a county to call for its educational leader outside of its own county or even state? Cities do this. Why not counties?

The country schoolhouse is no longer the social and literary center of the community wherein meet the spelling-schools, the literary societies, and the grange, together with the Sunday meetings. The school interest of the rural community is dead because the school has not kept pace with the general improvement. The rapid means of transit and communication brought to rural communities thru the automobile, telephone, and rural mail service have centered the interest in the towns.

The rural school must once again be the rallying-point of the rural community, but it must be the modernized rural school. The building and environment must be in keeping with twentieth-century progress. The new education would make the centralized rural school such an educational center. Consolidation has proven good. It is the only way that equal educational rights can be given to both rural and city child. It has proven that it increases the school term, the attendance, and that it provides better teachers and an enriched course of study. It is economical, because money is spent to better advantage and with less waste.

Consolidation has come to but few country schools. Children will for a long time to come be taught in the little red schoolhouse of the East and the box-car building of the West. What is the story of endeavor for the one-roomed country school? There are in these schools today more teachers who are better qualified than there were ten years ago. Many counties in Nebraska, for instance, are fast attaining the ideal that the country teacher must at least be a graduate of a twelve-grade high school.

There is an improvement in the architecture of these one-roomed buildings. Many of the new structures are scientifically lighted and heated. Many rural schools have basement furnaces.

Aesthetic culture, which has long been a part of the city-school environment, is coming to the rural school. It is creating a desire for beautiful school grounds. The old time white walls, blackened by the dust of years, are being decorated by paper or paint. We see within these one-roomed buildings window shades, clean sash curtains,

and freshly blackened stoves. The cheap calendar and gaudy chromo decorations are being replaced by well-framed copies of real masterpieces of art. This awakening of a love of order, cleanliness, beauty of form, and harmony of color in both the exterior and interior surroundings of the rural school is real education. A child nurtured in these surroundings will soon reach that degree of culture where nothing else will satisfy.

The only way to quench the dying interest of the rural school is to raise that school to a higher plane and then place therein a *living* teacher. Next to the teacher the county superintendent is the greatest factor in rural-school progress. Where both have been devoted to the betterment of rural conditions, these many points have been won for the one-roomed country school.

THE STATE SUPERINTENDENT, THE COUNTY SUPERINTENDENT, AND THE STATE NORMAL

J. FRANK MARSH, ASSISTANT STATE SUPERINTENDENT, CHARLESTON, W.VA.

In this discussion I wish briefly to mention two or three fundamental principles of co-operation in the fields indicated by the topic under consideration and with your permission use my own state, West Virginia, to make plain what I mean by these propositions:

1. *The law governing school administration should provide for a system that is non-conflicting, simple, and strong.*

Previous to 1908 each state institution, including the state university and six normal schools, in my native state had a large board to look after its peculiar interests and protect it against the encroachments or progressiveness of any other similar institutions. These boards, composed of some good school men, some good politicians, and many just ordinary "also men," met many times and at many places. The law creating these nine boards of regents and sixteen boards of directors, aggregating 168 members, made very unfavorable conditions for co-operation. Our state, suffering under this load of a too cumbersome organization, threw off this weight "that did so easily beset us." We now have a bi-partisan State Board of Control composed of three high-salaried men appointed by the governor. This board has complete charge of the business affairs of our twenty-one state institutions. They pay teachers and officers, make repairs, buy furniture and food, in fact, carry on all the business from buying breakfast bacon for the reform school to building an agricultural hall for the state university. Besides saving the state about $250,000 annually, this board saves much confusion, and makes business co-operation compulsory. For example, under the previous plan, when the session of the legislature came there came also many members of faculties and normal-school principals demanding that their respective schools and sections of the state get their share of the public money. This condition brought about a kind of "Rob Peter to pay Paul" method of appropriating for the state schools and therefore destroyed co-operation.

Under the Board of Control method of supervision, the school principals and teachers remain at their professional posts during the legislature, feeling secure with the assurance that the Board of Control with well-kept records and carefully worked-out recommendations will see that all institutions are cared for in a business-like way.

A similar change was made for the betterment of the professional management of the state schools. A bi-partisan Board of Regents, appointed by the governor with the state superintendent of schools as president, has full charge of the university and normal schools, as to employment of officers and teachers and the fixing of salaries. Thru this one board the normal-school principals work out a unified plan in regard to courses of study, placing of teachers, and general policy. Under such management former irregularities and jealousies have disappeared and hearty co-operation has taken their place.

I am aware that many states are similarly organized and am also aware that many states still have laws and organizations which do not tend toward co-operation. As stated in my first proposition, the organization should be quite simple. Too many boards

for this, and boards for that, and committees and subcommittees divide responsibility, dissipate energy, and destroy conditions for harmony. Where such a process is needed, the lawmakers should draw the legislative rake thru the school system, straighten out the kinks, and gather up for elimination all superfluous and conflicting organizations and officials.

2. *Law and custom directing educational affairs should provide for reciprocal pull and push among school officials.*

For example, lines of communication and responsibility between the state superintendent and county superintendent should be numerous and strong. If the law does not make specific provision for this condition, those in authority should assume such relationships. By means of reports, conferences, campaigns, appeals, publications, and much correspondence continuous help should flow from one to the other. I believe in the people and local initiative, but on the other hand I believe in a strongly organized government from the head down, with every link so strong that the officials can, if necessary for the general good, shake the uninformed people out of their boots, provided of course the boots are old and out of date.

3. *School officials and other school workers should be bound together by an educational enthusiasm that carries them beyond the narrow limits of law.*

Being a Methodist, I can best express my idea on this point by saying that we should "get educational religion" that will set us on fire with zeal. In my state the brethren have been stirred up to good works by (*a*) a campaign for more professional reading outlined in teachers' reading circles; (*b*) teachers' county and district institutes; (*c*) round tables; (*d*) School Improvement League; (*e*) school federations; (*f*) county superintendents' conferences; (*g*) county mass meetings of members of township boards; (*h*) conference of institute instructors; (*i*) school visitation; (*j*) annual education conference at summer school of state university; (*k*) State Education Association; (*l*) many field campaigns carried on by co-operation of county superintendent, state superintendent and his assistants, normal-school principals, and other educational leaders; and (*m*) extension schools of the College of Agriculture. The effects of these means for personal contact, followed up by an abundance of literature, ought to be to make educational spirit as universal as ether.

While these remarks are confined to state work, I am not ignorant of the fact that educational enthusiasm knows no state boundaries. Let every one of us, like Absalom's conspirators, kindle our bonfires and blow our trumpets from the hilltops when the call comes from Hebron, so long as the call is worthy to be passed to others.

THE STATE SUPERINTENDENT AND THE GENERAL AND SOUTHERN EDUCATION BOARDS

GEORGE B. COOK, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, LITTLE ROCK, ARK.

This subject is one that presents certain difficulties in attempting to review the relations of the General and Southern boards with the state departments of education, as briefly as necessary to do on this occasion. There is the constant temptation to relate the statistics, setting forth in detail just what these boards are doing in the several states. Again, this is a subject with which those assembled here are generally familiar, and there is very little to be said that is new. Furthermore, it is scarcely fitting to bestow upon those who are devoting their time and money so generously and so effectually to this work the praise they so richly merit but which they do not seek.

There is, however, a great object-lesson in the very fundamental principles which actuate both the General and the Southern boards.

First, there is the close relation between these boards: thoro understanding of just

what each board is specifically doing; no overlapping of efforts or funds; no waste by duplication.

Again, both boards have taken every means to know existing conditions and needs. Their preliminary investigations have been thoro and far-reaching, and upon this solid foundation of fact have they builded so wisely for both the present and the future.

Then, their efforts are stimulative and corrective rather than purely creative. That is to say, these boards have taken advantage of every initiative on the part of the people and the states for educational advancement. They are elevating and standardizing those phases of educational development, and the attendant institutions, with which the people are acquainted and which have the support of public sentiment, already more or less clearly defined.

And, finally, every gift from the General or Southern Education Board has been placed without the least affront to the self-respect of the people or the institutions receiving these gifts. There is no tendency to pamper or make dependent the recipients of their generosity.

These boards are composed of men who not only represent, but who are, the highest types of our civilization—men who have dealt with and handled successfully the larger affairs of life; men upon whom rests a great responsibility, and one which they realize, a responsibility not only to the present but to future generations; and in the work of the General and Southern boards is this great responsibility being discharged to the betterment of mankind for all time to come.

The men who compose these boards have associated with them other men of equal merit—men who have been selected from the millions with a view solely to their peculiar and special fitness for the mighty work to be placed in their hands—men of acute and specially trained minds and, moreover, men with pure hearts and noble motives. In the hands of such men have been placed the execution and administration of the affairs of these boards.

While these two boards are so closely cognated, their work is somewhat divergent but always harmonious.

The General Education Board was chartered by Congress in 1903, and the original gift of Mr. Rockefeller of $1,000,000 in 1902 was increased by $10,000,000 in 1905, and by $32,000,000 in 1907.

The statement of the fund, as published in the 1910 report of Dr. Elmer Ellsworth Brown, United States Commissioner of Education, shows approximately twelve and one-third millions, with an income of over one and one-quarter millions, in the special fund under the direction of Mr. Rockefeller and his son; while the general fund is over thirty millions, with an annual income of four and one-third millions of dollars.

The broad purpose of the General Education Board reads in its charter: "The promotion of education within the United States of America, without distinction of race, sex, or creed."

The practical application of its beneficences is divided into three important heads:

1. The promotion of practical farming in the southern states.
2. The development of a system of public high schools in the southern states.
3. The promotion of higher education thruout the United States.

The activities of the General Board, along the three lines just named, are very clearly set forth in the report of Dr. Brown for 1910. This review presents to the thoughtful reader a most remarkable array of facts.

All of us are familiar with the wonderful progress toward practical farming that has been made thruout the South during the past five years—how hundreds of communities have been awakened in every southern state; how 200,000, or more, farmers are working under the direction of some 200 farm experts; how tens of thousands of boys have been enrolled in the boys' corn clubs; how nearly all of us in the South have accepted, at their proven value, the practical application of scientific facts in farming and stock raising;

how, during this short time, the farmer who sneers at "book farming" has almost become the exception, instead of being the rule.

This work, accomplished thru the United States Department of Agriculture under the wise direction of Dr. Seaman A. Knapp—than whom none is greater in our generation—has been made possible by the unostentatious and generous contributions of the General Education Board.

In view of what has been accomplished, what is now being done, and what the future promises, it is scarcely an exaggeration to say that this one phase of the work of the General Board is the basis of the most effectual industrial revolution of modern times.

But this is not all. In the promotion of public high schools the work is equally significant and effectual. Thruout the South, our educational systems were not in reality systems at all. There was an almost impassable chasm. We were extending our elementary schools, and broadening our colleges and universities, but the weak point was our want of secondary schools. This burden was placed as a millstone about our institutions of higher learning. They were weighted down and held back by preparatory departments.

The General Education Board has come to our rescue by establishing professorships of secondary education in each southern state. Approximately one thousand high schools have been established and the expenditure of $7,000,000 in high-school buildings and equipment has been effected, and our institutions of higher learning relieved on the one hand, while on the other a new impetus has been given the elementary schools.

This brings us logically to the third phase of the work of the General Board, the promotion of institutions of higher learning, which reaches the entire nation.

The permanent endowment of colleges and universities places these institutions above the temptation of commercialism, and enables them to develop along the highest lines, intent only upon the single purpose of their existence.

The direct contribution of five and one-quarter millions of dollars by the General Education Board, in the eastern, western, and southern states, used as the basis for stimulating local effort, will result in a grand total of $23,000,000 in permanent endowments.

In order to cover fully the entire educational field, the General Board is establishing state supervisors of rural and elementary schools.

So we have presented a comprehensive plan for material, aye, and for spiritual, uplift. By promotion of practical agriculture, productiveness is increased, values enhanced, and the ability to support our enlarged educational systems is given, with the sure reaction of giving back to the states for life's struggles young men and women better, and ever better, trained in heart, mind, and body.

The Southern Education Board was organized in 1901, after the Fourth Conference for Education in the South. Following a preamble setting forth the importance of universal, practical education, the needs above existing conditions, and the unusual opportunities for progress presented with the beginning of the new century, this resolution was adopted, and serves as the basis for the activities of the Southern Board in lieu of charter, constitution, and by-laws:

Resolved, That this conference proceed to organize by the appointment of an executive board of seven, who shall be fully authorized and empowered to conduct:

1. A campaign of education for free schools for all the people, by supplying literature to the newspapers and periodical press, by participation in educational meetings, and by general correspondence; and,

2. To conduct a bureau of information and advice on legislation and school organization.

For these purposes this board is authorized to raise funds and disburse them, to employ a secretary or agent, and to do whatever may be necessary to carry out effectively these measures and others that may from time to time be found feasible and desirable.

The powerful influence this board has exercised in creating public sentiment and effecting the crystallization of this enlightened sentiment into activities and laws cannot be measured.

Thru the direct influence of the annual conferences for education in the South and the various campaigns, conducted under the auspices of the Southern Board, the very term "education" has come to mean something very different from the older, vague, indefinite conception. Education has come to mean training for life's work, the upbuilding of efficient citizenship of real men and real women, equipped physically, mentally, and morally to live happy, healthful, helpful lives in harmony with their environment.

In his annual address before the Conference for Education in the South last year, Mr. Robert C. Ogden, the president of the conference and board, whose name is called to all our minds whenever the Southern Board is mentioned and whose grand and noble life has so largely made this great work possible, stated that during the last seven years the public appropriations for education in the states under the influence of the Southern Education Board have increased $16,000,000 per annum. Indeed, I am very much inclined to believe that during the year now nearly elapsed since Mr. Ogden made this very conservative estimate, this figure has become much too small.

Yet this is only one expression of the results accomplished very largely thru this board. The several state-wide campaigns for educational revival, the organization and support of education commissions, and the school improvement work have, one and all, been potent forces in arousing and directing public sentiment for public schools.

And I believe that it is not entirely out of place to remark that this great campaign, this new understanding of the duties of the several states to educate and equip its citizens, this acceptance of education as the training for work, has done much toward the solution of our bi-racial problem; and our people, to a very great extent, have taken a different view on the question of educating the negro, for the education they are now getting is rapidly coming to be more carefully adapted to their needs, calculated more specifically to make them useful, cleanly, and industrious. This work has shown no short cut in this long and difficult problem but it seems to have indicated the practical application of a great fundamental principle, long overlooked.

Closely associated with these major activities are the Jeannes and the Slater funds specifically for the education of the negro. Then, there are many foundations and funds for civic, social, moral, and physical uplift, which are aiding thru every avenue but which are not so closely allied to the state departments of education.

I do not feel that I should conclude these remarks without calling to mind the great forerunner of these beneficent enterprises, the Peabody Foundation, now so nearly to the close of its active existence by name and organization. The South can never adequately express its debt of gratitude to the founder and to the administrators of this fund, which during the past half-century has done so much to give to our public schools teachers trained for their work and which is to have as its lasting monument a great Teacher's College as one of the priceless jewels of our Southland.

Those who compose this Department of Superintendence know and appreciate the great work of the General and Southern Education boards and, I am sure, every member stands pledged to the uttermost to lend every co-operation to this noble cause of noble men for humanity—this great cause that has for its purpose nothing less than enriching a nation with material wealth and the far greater wealth of a citizenship with trained minds in whole bodies, directed by pure hearts.

ROUND TABLE OF SUPERINTENDENTS OF SMALLER CITIES

TOPIC: UNITY OF IDEALS AND PURPOSES IN TEACHERS

A. AS GAINED FROM PROFESSIONAL TRAINING

ALFRED C. THOMPSON, PRINCIPAL OF STATE NORMAL SCHOOL, BROCKPORT, N.Y.

The commissioner of education of the state of New York in a recent address said:

Of course the main educational concern of New York is that her people shall be trained in common honesty. Where that is accomplished, much of the other training takes care of itself. If it is not assured, the other training is of little avail.

Substitute the word "nation" for "New York" in this noble sentiment and you have the keynote of all that I shall say. Unity of ideals and purposes can be promoted by professional training if elemental honesty is the precept and practice of those who direct and instruct, and if it is the mainspring of all thought and action.

The commonest defect in our social organism is that men, who would not rob a neighbor of the loaf of bread upon which he nourishes his babes, will unhesitatingly steal all of the grain in the world, from which the bread is made, even if it should mean the destruction of all of the babies in the world.

We may quibble about educational creeds and methods. With equally good intentions one may seek good results in one way and another in another way. We can never settle definitely the means by which teachers may secure the desired ends. David could not fight in Saul's armor. There can never be uniformity of method, but there may be and should be unity of purpose.

We are dealing with the souls of men. Ideals determine the destiny of souls. Honesty should be the essence of all ideals and purposes set up by professional training. Not the anaemic honesty that manifests itself in sentimental emotions and hysterical bursts of spectacular charity—or, in other words, the kind that men have who do good Sundays and "do" their neighbors all the rest of the week—but the kind that makes people good to live with and safe to do business with; the kind that gives men a broad perception and appreciation of the situation and interests of those remote from them in distance or social rank, whose lives their conduct influences for good or ill.

Professional training has much to do with creating ideals because intellectual content is vitally essential to the ideal since the ideal must contain the particular knowledge fitted to arouse thought and control action.

No longer than a generation ago it was the chief purpose of teachers to teach subjects rather than pupils. Even today in many schools it is safe to say that there is more teacher-study by pupils than pupil-study by teachers.

It is undoubtedly the first duty of professional training to start the teacher on the right track inspired with the purpose to know and teach children and to help each child attain his highest possibilities.

Professional training must make it clear that knowledge is good, but that wisdom is better; that a learned man may be a fool and a knave, but a wise man never; that it is a much greater thing for one to be good because he wants to, than because he must; that the will cannot be forced, but that it can be led; that the teacher's province is less to instruct than to guide; that it is not a teacher's business to lay down precepts, but to teach pupils to discover them; that the quality of effort one makes is worth vastly more than what he gets as the result of the effort; that ability to think and to direct one's efforts economically will do vastly more toward giving one a position in life than a knowledge and control of any specialized symbols of learning; and finally, that the teacher's responsibility is to arouse a lifelong interest in the things in which the pupil ought to be interested, in order that, when the training of the school is over, the education of life may continue such training as long as life lasts.

One of the purposes of a teacher should be to cultivate the spirit of thrift in himself and in his pupils. I do not mean thrift as it is popularly understood and practiced. Under the name of thrift great masters of finance and corporations have adopted questionable methods and have devised subtle means and dishonest ways of misleading, in order to compel those who must buy the commodity they control to buy at unfair and excessive prices, that they may wring from the helpless purchaser inordinate gains for themselves. This spirit has permeated our commercial life and in some measure all classes of our people.

I mean honest thrift which offers an honest article and demands a fair price. Is it not a very proper part of professional training to set a fair estimate on its own product? It is not very long ago that the notion obtained that the only necessary qualification for a teacher was the missionary spirit and the schools were regarded as eleemosynary institutions in consequence.

The missionary spirit is most commendable, but the time has come when school work is not missionary work. There is nothing more vital to a nation's welfare, and its very existence, than education. It is not only a nation's chief defense, but its cheap defense. The most economical insurance a nation can carry is education, and the nation must not be relieved of supporting education by shifting the burden onto the shoulders of missionaries.

In my opinion, the low financial estimate put upon education by our nation is responsible in large measure for the small number of men engaged in this work. Not only is the pecuniary compensation forbidding, but a person's social standing and influence are too often based, not on the character of his work, but on the amount of pay that he gets for it.

Certain it is that *pedagogicus masculinus* is fast disappearing in our country, and unless conditions change it is very likely that he will at no distant day become as extinct as the great auk. It is most unfortunate that the inducements to enter the teaching profession are not sufficient to lead able young men to make the sacrifice in time and preparation which the work demands, for the teaching profession will never receive the recognition which is its due until more men enter the ranks.

I do not want this interpreted as belittling in any way the splendid work women are doing, but teaching must be a man's as well as a woman's job. Children can be best fitted to take their places in the social organism only thru the instruction of both men and women. I believe that all of us will accept this without argument.

There are many more reasons why men do not voluntarily go into teaching. I believe it will be germane to this discussion to introduce two or three of the most prominent ones.

Tenure of office is very uncertain. From statistics covering quite a wide field, it appears that the tenure of office of men in the teaching profession is less than three years, and in almost all places teachers must be subjected to the humiliation of annual election, when all of their shortcomings are raked over by school officers and aired in the community. This nomadic existence with its attendant worries is not likely to induce contentment and a frame of mind suited to the best intellectual effort.

When young men about to choose a life's work see school men and school women, thru no fault of their own, going down and out, for causes too numerous to mention, the prospect is not alluring.

School work has not yet attained the dignity of a business. The business sense is pretty strong in most men. They like to engage in callings whose management is dignified, where authority and responsibility are commensurate, where there are large opportunities and large outlooks.

Again, statistics show that less than 3 per cent of men teachers receive what is generally regarded as a "living" salary for a family. I firmly believe that the altruistic spirit controls most teachers and that very few are governed by mercenary motives, but the biological end of existence, which is to perpetuate one's kind, impels a man to choose life work which is likely to afford the means of supporting a family.

It is my firm conviction that all of us engaged in the work of education should do all in our power to improve the condition of the teacher financially and otherwise. A reasonable spirit of honest thrift will not lessen the teacher's quality of effort. It will not prevent him from trying to improve his skill in teaching and to make his field of learning more extensive and accurate. It will not lessen his desire to perfect himself in fine manners. He will seek just as earnestly to raise the standard of his character. He will be even more likely to strive to make himself the desired professional teacher.

We may be sure that nobody will put a higher estimate on our work than we do ourselves. I believe that to try to better our financial remuneration and general condition by every honest means in our power is compatible with the highest purposes and noblest ideals.

Unity of ideals and purposes may do much to strengthen a public sentiment in favor of those methods which are best for our country's welfare. But how bring about unity? Unity is not made. Like Topsy, it grows. In trees there is unity; in telegraph poles, uniformity. The first is one of the highest expressions of a divine power. The last is man's work.

Undoubtedly, if there is to be unity it must be in that subtle something we call character in both its subjective and social phase. What we are, pertains to the real, true self. What we do, has its influence on those about us.

A young child acts under the inspiration of suggestion, and when he is older, under the inspiration of ideals. As the chameleon's color changes with the color of the objects about it, so is the child's character acted upon by what we teachers are and by what we do.

This faculty of being easily influenced surrenders children to the mercy of their elders; therefore we, the elders, the teachers, must have the single purpose of surrounding children with the influences that will lead them to aspire to the things that are honest. In all of our ideals and purposes, it seems to me that this should be the ultimate, the supreme aim.

Heavy demands are made on the several educational agencies for professional training which are endeavoring to meet the exacting requirements that are set for teachers. It is most fitting that there should be among these agencies a unity of ideals and purposes, for certainly the requirements asked would tax genius and divinity.

I have made an attempt to collate from different sources some of these requirements for a successful teacher. A teacher to measure up to the demands must have the learning of a college president, the consecration of a clergyman, the executive talents of a financier, the humility of a deacon, and the craftiness of a politician. He must be an angel for temper, a demon for discipline, a chameleon for adaptation, a diplomat for tact, an optimist for hope, and a hero for courage. He should have the wisdom of a serpent, and the gentleness of a dove, the grace of God, the patience of Job, and the perseverance of the devil.

Let such teachers bring to our schools the cultures that make for a noble citizenship, but let the people bring to their support the utilities that make for a material success, without which citizenship is a mockery and democracy a farce.

B. AS GAINED FROM SCHOOL SUPERVISION

E. C. WARRINER, SUPERINTENDENT OF SCHOOLS, SAGINAW, MICH.

A short time ago, the head of the department of modern languages in one of our normal schools offered the following criticism on the course of study in their training school. "What do you think my boy, now in the second grade, is getting?" he said. "I asked him the other day what he was studying in school and he replied, 'Twice a week we have manual training and three times a week we have primitive arboreal man.' Now what do you think of that? Even if we have risen thru the cave-dwelling and the tree-dwelling and the man-eating stages, I'd like my child to get thru those epochs just as soon as possible

and get to living in the world today. I'd like my boy to have some instruction in penmanship, which he doesn't receive, and I'd like him to read about the twentieth century A.D., not the twentieth century B.C." I confess that I sympathize freely with my friend, but I believe the dawn of a better day is visible. We are nearly thru the woods. I use this incident to introduce this query: How far should unity in a school organization extend? Should a teacher be required to teach what does not appeal to him? In thinking over my friend's criticism, I asked myself what should I do should I find myself in a teacher's position and required to teach first- and second-grade children about primitive arboreal man? Should the course of study be fixed or fluent, compulsory or optional?

My answer to this query is, the course of study should for the most part be a fixed quantity, while the methods of teaching should be optional. Supervision should say what is to be taught—the individual teacher should determine how this subject-matter is to be taught. Election of studies in the high school has gone too far in the past fifteen years, with disastrous results to the mental caliber of our high-school product. By analogous reasoning, the elementary course of study has been poisoned with freedom of choice on the teacher's part, which has brought forth indefiniteness of knowledge, superficiality of knowledge, and lack of knowledge in pupils who have finished our elementary schools. The supervising officers of a school system should not specify each day's work or each week's work but they may well mark out the studies by monthly or two-monthly periods. Latitude must be given the teacher's judgment as to what tomorrow's lesson in arithmetic shall be, but the course of study should say what topics are to be taught this month. This should not be left to the teacher's judgment. Perhaps the course of study may name twenty stories for a three-month period from which the teacher may choose twelve to tell in the second grade, or the course of study may enumerate ten poems from which the teacher may select two. Perhaps a half-dozen third readers may be listed from which the teacher may choose—I say "perhaps" because I am not sure but that even in these matters there should be a unity which can be secured best by prescription. It is undoubtedly true in story-telling and poem-teaching, less so in reading, that a teacher will teach well only what appeals to him as meaningful and forceful. If teachers are consulted, however, in the group, as to their choice of literature, an agreement can be reached which will be satisfactory to four-fifths of them and thus a unity be given even to these subjects. In arithmetic, geography, history, spelling, grammar, penmanship, I see no reason for giving teachers any choice as to what is to be taught. Supervisors may very wisely consult the experience of the classroom teacher as to what is best fitted to the child's age, but doubtful points should be judged by the supervisor, and always the final decision should rest with him. To hand over without reservation to a group of teachers the absolute and final decision as to course of study or textbooks is a dangerous policy for the welfare of the schools. The teaching group has the best of meaning, but they lack two things, possessed by the supervisor, which are essential to a determination of any important cause in any walk of life, namely, responsibility and breadth of view. Unless supervisors are charged first and foremost with the duty of saying what is to be taught and unless the supervisors are men and women of broad training, wide experience, and keen observation which shall make their judgment of value, there can be no excuse for employing them at large salaries. Two factors should decide what is to be taught in school, the child's capacity and the needs of the times. The study of primitive arboreal man may satisfy the first requirement as being adapted to the child's stage of development, but it is so out of harmony with the second criterion, the demands of the age in which we live, that it should be condemned if it is to be considered an essential part of a curriculum. On the other hand, arithmetic and geography contain in themselves the subject-matter adapted to the age and capacity of children of different grades. There can be no choice as to what the fourth-grade child should learn in arithmetic—he should learn the multiplication tables and long division. Why should any option be given in the fourth year's course of study of arithmetic? Geography may offer wider scope for difference of opinion as to what the fourth year's

course should be, but it is the supervisor's part to say what the topics shall be for his school system. It is then the teacher's part to teach what is found in the course of study as best he can. As has already been said, reading, literature, and language-study allow more ground for freedom of choice without loss of value. Yet even here, it seems to me there is a best choice of books to read and of stories and poems to learn. And my opinion is that more satisfactory students will be brought out of our schools if the supervisor lays down a course of language and reading to be adhered to pretty closely. This supervisor will be the superintendent for most branches of study in the smaller cities and the supervisor of special subjects in the larger cities.

The part of the individual classroom teacher is to instruct, to inform, to educate the growing children committed to his care, using as material for this purpose what the supervisor has laid down in the course of study. In this teaching the greatest liberty, the widest latitude as to method should be granted the teacher. He should be encouraged to test new methods, to plan new devices, to base his teaching upon recognized principles. The supervisor, from his deeper knowledge of these principles, from his wider observation of good teaching, and from his own skill in teaching, may reasonably be called upon from time to time to show the classroom teacher how to teach. But this is not the first nor the second function of the supervisor. His first function is to say what shall be taught, his second to see that it is taught. The supervisor of music, for example, should decide what music is to be taught in his schools. This he should plainly outline to his teachers and explain it to them in teachers' meetings. He should then visit the individual teachers to test their schools, to learn what has been accomplished, to offer suggestions for correcting and improving the results, and perhaps to give a model teaching exercise for the teacher's benefit.

Modern city school systems are in great danger of oversupervision. The rural school is most needy from the lack of any sort of supervision. The city system has gone to the other extreme, with its superintendent and special supervisors of music, drawing, penmanship, manual training, primary methods, nature-study, language and reading, etc. No wonder teachers are bewildered in trying to serve so many masters—no wonder hardly a day passes without having the regular program interrupted by the visit of a "special." With advanced and more extensive requirements as to the training of teachers, the time will perhaps come when our smaller cities can eliminate the visits of supervisors of special subjects. We may look forward to the time when teachers will be so trained in drawing, music, and handwork that they will be prepared as well to carry forward the teaching of these branches as of reading, writing, and arithmetic. At present the technical character of these subjects of study, coupled with the inadequacy of the teacher's preparation, makes necessary the classroom visitation of the supervisor. But let us see to it that this visitation is not so frequent as to become dwarfing and deadening in its effect upon the teacher. Weekly visits of any supervising officer, be he superintendent or special teacher, are too frequent. Once in two weeks, three weeks, or four weeks is often enough—never should scheduled visits of the supervisor be oftener than fortnightly. This will leave the teacher alone long enough to lay out a plan of teaching and to carry it into execution. Too frequent visitation is like the classic example of pulling up the beans to see whether they have sprouted.

Having now pointed out that a system of schools should have unity in its purposes, as set forth in its course of study, it remains to speak more closely of how this unity may be idealized and then carried out into living reality in the life of the school and of the community. To this the most important answer is—it can best be accomplished thru the personality of the supervisor. The supervisor includes the superintendent as well as the supervisors of special subjects. The ordinary means of supervision are well known and call for no comment here, namely, written outlines, teachers' meetings, school visitation, model lesson exercises, etc. But back of all these methods and above them lies the character of the supervisor himself. A supervisor of a special branch should be chosen first

for his knowledge of his subject. Nothing will take the place of this. He should have studied the subject-matter long and thoroly, he should have studied methods of teaching it and then he should have taught it under circumstances similar to those under which he is supervising the work. Unless the supervisor has taught in the classroom he will fail to appreciate the difficulties of the teacher's problem. The supervisor should also be a constant student. He should go on to perfection in his art. If he is a supervisor of drawing he should have continued practice in the art of drawing; he should be acquainted with the history of drawing and of fine arts, both past and present; he should be familiar with the theory and practice of art instruction, as carried on today in the schools of our own land, both public and private, as well as those of foreign lands. Besides this knowledge and skill the supervisor should have a sunny disposition which shall bring joy and inspiration to the teachers whenever they come in contact with him. His visits to the classroom should be like a summer breeze, bringing rest and refreshment.

Now what has been said of the supervisor may be demanded of the superintendent *a fortiori*. We have truly said in the past, "as is the teacher, so is the school." We may as truly say today, as is the superintendent, so is the school system. The true answer to the question before us, how to secure unity of ideals and purposes in teachers, is thru the personality of the superintendent. The ideals of the superintendent should inspire supervisors and teachers alike. In every city having no more than three or four hundred teachers, the superintendent should come closely enough in touch with the teachers to make his personal influence felt. This influence should be an educational force, not merely a commercial relationship. Fifteen years ago, when considering the advisability of giving up the high-school principalship for the superintendency, I talked the matter over with one of my college professors. He discouraged me from making the change, saying of the superintendency, "It is after all only a business." His manner and voice indicated his estimate both of the superintendent's work and of business in general. Connected with the superintendent's work are many commercial details, but they should be made as few as possible. Happily the tendency is to relieve the superintendent more and more of the selection of tablet paper and the repair of broken windows. To be sure, every part of the school administration is of interest to the superintendent. He must have enough native business ability and he must have given enough attention to school-board business to make his opinion of value to his board, but this opinion should be asked for only in emergencies. The questions which the board of education should ask of the superintendent are, Can our eighth-grade pupils write a business letter? Do our sixth-grade pupils have a legible handwriting? Superintendents should more and more train our boards of education to provide some other way of looking after janitors, schoolhouses, and school supplies than thru the superintendent.

Granted now that a school system should have unity, and that the superintendent is the unifying agency, how is his influence to be carried into effect? In the first place, the superintendent should have a policy, a progressive policy, probably not too progressive, and an aggressive policy, certainly not too aggressive. This policy will of course assume different aspects in different places and at different times. It may be the improvement of teachers in service, the awakening in them of a professional zeal; it may be practical education, making a vital connection between the school and society; this year it may be the improvement of teaching reading, next year of arithmetic, next year of composition, and so on. But the superintendent must have a definite policy, he must himself be conscious of what this policy is, and it must be recognized by the teachers. For getting before the teachers large questions of purpose and policy, nothing takes the place of the general teachers' meeting, on Saturday morning or on an afternoon when school has been dismissed for this purpose; never after four o'clock when teachers are tired and perhaps cross. Respect for the superintendent is the center about which unity of ideals and purposes should cohere, and the nucleus of this respect must lie in the superintendent's policy. He should be a leader, the educational leader of the community, but he should not there-

fore assume to know it all and resent any suggestion of school betterment. Every hint should be welcomed by the superintendent, carefully considered, and judged on its merits, whether it come from members of the board of education, teachers, business men, or even from the newspapers. The superintendent should keep just a little in advance of his board and his teachers and his community—one or two years in advance, not ten or twenty years in advance—this makes him unpractical and a dreamer, but he never should be behind his constituency—not even a month—if he is, time for his retirement has come.

Having a policy, well defined and well known, respect for the superintendent arises from several other factors.

1. As was said in regard to the supervisor, nothing will take the place of knowledge in commanding respect and even obedience. Knowledge of subject-matter is the best cure for nine-tenths of the classroom teacher's troubles with discipline, and so it is the solvent for the superintendent when he finds a lack of loyalty among his teachers. It is manifestly impossible for one man to have scientific knowledge of all or even of many of the particular branches of instruction. But the nearer the superintendent approaches to this knowledge, the better for his standing among his teachers. Even if not familiar with the latest data in all the sciences, he should at least be familiar with methods of teaching every subject. He should know the literature of methodology in every school subject and should be able to refer teachers to the sources. Moreover he should see that teachers study this literature and have opinions in regard to it. For example, the superintendent should know of the Aldine and the natural methods of teaching reading, he should know what topics recent writers would eliminate from arithmetic, he should know what emphasis to lay on war in teaching history, he should know why ancient history is taught in the first high-school year, he should know how algebra is taught graphically, why so few pupils take physics if an option is offered, why the natural method of teaching German and modern languages is advocated, how to make botany appeal to an increasing number of students—all these topics of current interest the superintendent should be familiar with, as a means of inspiring his teachers to know them too.

2. Respect for the superintendent grows also from a knowledge among his acquaintances that he is absolutely devoted to his profession. This devotion is of course evident from his knowledge of his subject, but it may also be judged from the time which the superintendent gives to his work and from the way he spends his time. The proper division of his time is one-half to school visitation, one-half to study. The superintendent needs to spend half his time visiting schools in order to know the needs of the pupils and the difficulties of the teachers, and he needs to spend the other half in study in order that he may have something more than platitudes to offer to the burdened teacher when he does visit her. Further, the superintendent should spend some time each year in visiting contemporary school systems. School boards are wisely learning to bear the superintendent's expenses in such visitation, but even at his own charge the superintendent cannot afford to pass a year without this source of information and suggestion.

3. A third source of respect for the superintendent is his teaching ability. The only adequate preparation for the superintendency is a degree or degrees, supplemented by actual classroom work, preferably first in the country school, then in a graded system, and last in a high school. One may be able to recognize poor teaching without having been a teacher himself, but one cannot show the unhappy teacher how to teach well without having taught. The classroom teacher invariably says to herself, and frequently to her next-room neighbor, "It's mighty easy for the superintendent to come in for twenty minutes once a month and find fault because the class doesn't know more, but why doesn't he take hold and show me how to do it? Because he can't." And, too often, fellow-superintendents, this is true; we can't do it. We ought to try our hand at teaching, teaching classes, or teaching a half-day at a time, enough to be able to show our teachers that we can teach and that we do appreciate their hard places from having trod them ourselves.

If a superintendent's life among his teachers is such as to command the respect I

have been describing, the result will be a unity of ideals and purposes because the teachers will make the ideals and purposes of the superintendent their own. The wise superintendent will gather his principals and teachers about him, take them into his confidence, ask them their opinion about everything, and, if possible, he will agree with them about everything. If, however, he must disagree with them, if he must ordain a course of study at variance with their wishes, the only possible way to have it taught is by teachers who respect the superintendent's knowledge, devotion, sincerity, and teaching ability, even when disagreeing with him. If then the course of study calls for primitive arboreal man, the teacher must teach it, but he will put no spirit into his teaching unless there exists in the system that *esprit de corps* which gives a unity of endeavor to all the teachers, derived from a respect for the policy of the school, as determined by the superintendent's life and character.

DISCUSSION

George A. Works, superintendent of schools, Menomonie, Wis.—In the discussion of this topic, we are made to face the fact that the superintendent who wishes to secure unity of ideals and purposes in any corps of teachers, must himself be in possession of definite, clear, and rational ideals of education. These ideals are of two classes: First, the broad general aims which underlie the work of the public schools as a factor in education. These ideals should be rationally progressive, but with all so firmly anchored in the best educational theory and practice that their possessor will not be swept away by every wave of pedagogical reform, either of a local or country-wide character. Second, the superintendent must also have clear and well-defined ideals of what constitutes high-grade classroom instruction, management, organization, and spirit. Lack in either of these respects means that the school system having such supervision will not reach the highest possible degree of efficiency.

Granted that the superintendent is well fitted for his supervisory duties so far as deals are a factor, he still has important functions to perform in getting these ideals before the teachers so that they may comprehend them, desire to make them their ideals, and to realize them in practice, in showing teachers how to attain these ends in practice, in following up this work to determine the degree of success with which teachers are meeting, and giving them encouragement when the results will justify it and further help where it is needed.

A rough classification of teachers may help in deciding upon the best methods of solution for these questions. There is in every school system a small percentage of exceptional teachers—people who have a vital interest in their work, and a thoughtful attitude toward it. They are people who would do good work without any or even with poor supervision. Such teachers need little more than the encouragement and loyal support of the supervisor in order to do the very best of work. When well grounded in pedagogical principles, they should be allowed and encouraged to make experiments in educational practice so long as they do not run counter to rational doctrine. Too frequently teachers of this group are held so closely by the machinery of the system that they lose the vital interest in their work that is essential for the best results.

A few words of explanation may make these last two statements more definite. In the graded-school system, each teacher has certain results to accomplish that the work of the grade may fit in with what has gone before and what is to follow. This may not always be the subject-matter that the teacher likes best to present, but whether or not it shall be used, should not be left to his determination. In general, the teacher's individuality becomes an impertinence when it determines what is to be taught over any considerable period. There is ample opportunity for the exercise of the teacher's judgment in determining the method of presentation. When teachers are lacking in individuality, the superintendent must at times enter even this field and insist that his methods be used. Upon this basis, individuality may be developed in the teacher's work.

The second class, which comprises the majority of teachers, are those who render a medium or fairly good quality of service. Conscientious, frequently to a fault, they fall a little short of the first group because of lack of initiative and thoughtfulness. Such teachers need frequent encouragement and inspiration from the supervisor to keep them from losing faith in themselves and their work. The third and last group are the poor teachers. Here is to be found the teacher of some ability, but devoid of interest in her duties. Frequently it is impossible for the superintendent to substitute interest in the school affairs for the social or other extraneous interests which already occupy this teacher's attention. There likewise belongs to this class the teacher who is so weak in discipline or some other fundamental characteristic that, in spite of all the help the superintendent is able to give, he is not able to cope successfully with the daily problems of the schoolroom. In fairness to the pupils and these two kinds of individuals they should be dropped from the service, and unless a superintendent is free to do this he should not be held responsible for their work. In this same group are found teachers completely lacking in initiative but who, by imitation of others, do passable work. The proportion of this kind that has to be retained in a system depends on the salary schedule. There is also in this group the weak teacher who is capable of considerable growth when subjected to proper stimulus. With these two kinds of teachers, there is much need of frequent individual conferences with the superintendent, a possibility in the small school system. There rests upon every superintendent a solemn obligation to do his best by each teacher that works under his direction. When a teacher is failing badly, it is the duty of the supervisor to make the best possible analysis of the failure and discuss the causes fully and frankly with him at an early date. The teacher should not be permitted to go thru the year without warning and then dropped unceremoniously or foisted upon an innocent superintendent in some distant city. We should realize fully our opportunity for helpfulness to the weaker members of the teaching staff.

From this part of the discussion it is evident that we believe a great deal in the personal conference in securing proper ideals in a teaching force. But even in the small school system, not all can be accomplished by this means. Further help may be secured thru the different kinds of teachers' meetings. There should be the general teachers' meetings about once a month so that the superintendent may have an opportunity to impress on his co-workers his views of education, to keep them in touch with the best pedagogical thought, to commend that which he has found in his visitation that may be worthy of commendation, and to offer constructive criticism where it is needed. When pedagogical literature is made the basis of study, the results obtained will be greatly improved by placing in the hands of the teachers thought-stimulating questions when they are preparing on the subject-matter. At these meetings the topics of discussion should be of such a character as to appeal to all teachers, and have in them something of help to all. There is no virtue in teachers meeting for the sake of formality. Some of the complaints that are registered against teachers' meetings come from our most conscientious and loyal co-workers because we give them stones when they ask for bread.

If all of our teachers belonged to the first class described, there would not be great need for more than the general teachers' meetings. The large number of teachers in groups two and three, however, make very necessary the meetings by grade and by subject. In the first of these meetings the teachers of a given grade are brought together to consider questions peculiar to their grades, and in the second the teachers working with a particular subject in two or more grades meet for consideration of the subject. It is well to let the teachers know in advance what the topic of the meeting is to be so that they may come prepared to take part. Occasionally these gatherings may be devoted to a consideration of some of the general criticisms the superintendent has brought together as a result of his visits to classrooms. A plan that has proved very helpful is for the superintendent to group the criticisms he has to offer so that a fundamental weakness underlies any given group. A thought-stimulating question or series of questions based on each weakness

may then be prepared and placed in the hands of the teachers. They are required to answer these questions in writing in advance of the meeting. Some of the answers may be read and made the basis of discussion. They are all given to the superintendent, who goes over them with care and indicates by notations wherein the teacher fails to grasp the problem, and perhaps indicating some article or book that his wide range of reading leads him to think will be helpful to the teacher. In the small school system, it is possible and desirable to have these meetings partake of the nature of the conference in which the presentation of some topic or the subject-matter called for in the course of study is given consideration. In these gatherings, the teachers should be made to feel perfectly free to express their opinions. The superintendent needs to guard against two things: He must not mistake the criticisms offered as personal matters when they are intended only to apply to his plan, nor must he allow the trend of discussion to get out of his control. These meetings frequently give the superintendent an insight into the perverted philosophy of a teacher that it would be impossible for him to get in a more formal meeting, and which he might not discover in several visits to the classroom. In these conferences, the superintendent will find that the teachers of the first group will be able to render material assistance. The number of these meetings that are handled by the superintendent in person will depend on the size of the system and its organization.

In closing this discussion, let us again refer to the individual conference with teachers of which we do not make enough. These interviews may be made an opportunity for indicating to the teacher helpful literature to be read by him and discussed later with the superintendent. This practice gives a purpose to the teacher's reading that is frequently lacking in the general reading. We need to make a fuller application of the policy of the successful life insurance agent who does not attempt to sell life insurance en masse. These personal conferences should be made occasions for the fullest and freest of helpful criticism. Too frequently we make the serious mistake of not telling teachers plainly wherein they are failing, and showing them how to improve. A supervisor need have no fear of talking with absolute frankness to teachers of their weaknesses when they realize that he intends to treat them with fairness and when they know that the interest of supervisor and teacher lie in the same direction. The superintendent who because of his ardent desire to have things running smoothly neglects to face weak teachers with their failings makes a serious mistake. So common an error is this on the part of the supervisors that it seems a good custom to have the supervisors of special subjects hand to the superintendent written statements regarding the work of each teacher under his supervision, so that where adequate progress is not being made by a teacher arrangements may be made for a meeting of teacher, supervisor, and superintendent. Frequently this method results in a marked improvement on the part of the teacher. It has a further value, in that it shows the supervisor the necessity of candor in discussing work with teachers, and results in a marked diminution of the occasions for the superintendent taking part in such cases. It is well, in case of serious failure on the part of the teacher, to have a written statement by the supervisor, of the criticisms that have been offered, accompany the general estimate of the teacher's work. At the bottom of the failure to discuss frankly with teachers the respects in which they are failing lies the fear of hurting their feelings. The teacher who is worth while is not only glad to receive criticisms, but seeks them when they are given with candor and sincerity.

These methods, joined with loyal support of teachers on the part of the superintendent because the teacher who is good enough to keep in the system is good enough to support, will secure unity of ideals and purposes as far as such unity is desirable, leave sufficient latitude for the exercise of the teacher's originality, and free the school system from the working at cross-purposes that sometimes characterizes it. As is readily seen, to carry out this plan means that the superintendent must be free to spend much of his time in visitation and not attempt to supervise at long range.

C. AS GAINED FROM SCHOOL ADMINISTRATION

MRS. SARAH E. HYRE, MEMBER OF THE SCHOOL BOARD, CLEVELAND, OHIO

The subject which the chairman of this department has given me is so large and my time so short that I shall have to confine myself strictly to the assigned subdivision.

My own experience and observation as a teacher, parent, and member of the Cleveland Board of Education for the past six years, during which time I have had intimate association with the teacher and public, lead me to say that the administrative work of a board of education may aid in securing "Unity of Ideals and Purposes" in teachers in the following ways:

1. By establishing in the minds of teachers and the public this fact—that each and every official act always receives thoro and just consideration by the board members, according to the best information obtainable and based upon the merits of the question under discussion.
2. By giving thought to questions of public education so that legislation affecting the teacher's work and welfare of the child will show intelligent study of these matters by board members as well as some knowledge of the great responsibility of the teacher, and a material appreciation of the profession of teaching, fitted to rank with other professions.
3. By encouraging and promoting ways and means for bringing the community nearer to the teacher and into closer touch with the great problems of the public school.

The young teacher graduated from normal school, imbued and inspired by her study of the philosophy and history of education, carrying with her the high ideals of the profes sion she has chosen, believing that all the world must pay honor to her calling, is employed in some school system by a school board and is assigned to a building. Around her she sees silent, patient, plodding, faithful teachers. The principal is wise and discreet. Most of them had been there for years and thru those years the changes that had come led them to believe that the school boards, which had come and gone, possessed little knowledge of the teacher's work and the demands upon her in the interest of the child.

They had observed that the places occupied by these honorable members, in many cases, were used as stepping-stones to higher political honors, or to some personal advantage. They had naturally concluded, after watching the combinations which for years had worked to the advantage of everybody else but the child and teacher, that "pull," not merit, that "schemes" as well as "ideals" must form a part of their service, which they render for that meager salary which is generally less than that paid to the clerk or typewriter or bookkeeper in a reliable business house.

Is it strange that teachers under these conditions lack faith in those who administer the system and that they soon impart it to the new teacher? Is it any wonder that the confidence of this young teacher should be disturbed? That the faith which she had acquired during her normal course in her teachers, in her profession, in the splendid work of the public schools as she had conceived it, should have been shaken?

There are grand and noble teachers whose minds and hearts are so poised that no influence, however great, can turn them from their high ideals and purposes, but most of them are like the rest of us, simply human, and are affected by the standards and examples which those in authority set for them.

It is not that a board of education must enact legislation which is agreeable to the teacher, nor that it must canvass the views of teachers upon questions of administration, but in my judgment, it is necessary and vital to a unity of ideals and purposes in teachers that they shall believe that, whatever the action of their administrative board may have been, it was true to a conviction and inspired by a desire upon the part of the board members to do the best thing possible for the schools.

A board of education must make its rules and regulations governing groups of teachers uniform. There must be no discrimination. Equity must mark every official act of privilege and salary, if confidence in the administrative board is to inspire the teacher.

I once heard an able and scholarly teacher, who was an authority upon educational topics, say:

I do not always agree with a certain member of our board. I would not always vote as that member does if I were in the same position, but I believe in the honesty of purpose of that member, and his desire to do the best thing for the schools, and such a one can always be trusted to finally come to a proper solution of school problems.

My own experience leads me to say that teachers are reasonable, that by the nature of their work they are patient with those who err in judgment, so long as integrity is manifest, but the ideals of the teacher are easily disturbed when confidence is shattered.

Most boards of education do the best that they know; the trouble is that the average board is not equipped to decide educational questions.

In some localities members are elected to the board because they are politically ambitious and deserve recognition and there is no other place where the party can locate them.

And then there is another type of school board which has numbers of good people on it who are capable business and professional men, but are not prepared to analyze the serious problem of educating children. They have made a great success in their business or profession, but they have never given more than a passing thought to the schools. At a state meeting of school-board members a teacher was reading a paper and referred to "elementary," "grade," and "secondary" schools. A newly elected member turned to me and asked, "What does he mean by 'elementary,' 'grade,' and 'secondary'?"

The tendency of school boards is to undervalue the work of the teacher.

It is not a studied or intentional lack of appreciation, but simply a lack of knowledge as to the years of preparation a teacher must undergo, and the responsibility which said teacher must assume in the schoolroom.

If a member is an employer of labor including clerical people, he is likely to rate the teacher's work by the hours he puts in and the wages the employer pays his people, contrasting the hours of work for his office force from 8 A.M. to 5 P.M. with those of the teacher from 8:30 A.M. to 3 P.M. It is often hard for him to see why he should pay his bookkeeper $100.00 for eight hours' work for six days a week, and then vote one hundred and fifty dollars salary per month for a teacher who teaches high-school pupils from five to five and one-half hours a day for five days a week. We ought not to be too hard upon these members. It is the commercial viewpoint, but honest as it may be, it nevertheless works havoc with the "Unity of Ideals and Purposes" of the teaching force.

Teachers who enter upon their work equipped for it must spend as many years of hard work and expend as much money as is required to prepare for law, medicine, or the ministry, and yet the dignity of "profession" is denied the calling and it is looked upon as just "school-teaching," an "easy job."

Until men and women engaged in teaching shall combine to have their work recognized as a profession, until boards of education and the community shall look upon teaching as something more than an easy way of earning money out of the public treasury, the ideals and purposes of teachers are bound to be a fluctuating quantity.

I am one of those who believe that teachers place efficiency of their work before its money value, that their first concern is the child and what they can do for him, but again teachers are just human, and must provide for the necessities of life. Many of them must support families. They must dress well and must seek means of professional improvement in up-to-date methods, as no other profession requires. The teacher is not only charged with the duty of imparting knowledge to the child, but is expected to fill in where the home fails. There is not an hour in the day in which the successful teacher is not adding to the moral, civic, and social development of the pupil.

The state and the nation look to the home and public school for its citizenship.

The home may fail to do its duty, but the public schools dare not falter in their purpose if this nation is to be permanent.

The representatives of government at Washington, coming from all parts of the country, are not sufficiently impressed with the importance of the public schools and their administration, nor the responsibility of the teacher in the making of American citizens, or else they would have given before this to the National Department of Education a suitable building and equipment and an endowment fund for research work. This act alone would impress local boards of education with the dignity of teaching as a profession, thereby helping the teacher to maintain the ideals which he acquired during his years of training. It reflects no discredit upon any person elected to a board of education that he is not an expert upon pedagogy or is not familiar with questions of public education, but being elected, it is his most sacred duty to inform himself and to seek the councils of those who think and write upon these subjects, in order that he may give intelligent support to the superintendent in the carrying out of his policies. If research work could be conducted by the National Department of Education and reports furnished free, it would place at the disposal of boards everywhere statistics and facts which would keep them in touch with educational progress and would qualify them to enact such school legislation as would best suit the needs of their respective communities.

It would help them to realize, as few boards do, that the teacher's real work is the making of citizens who shall have acquired not only a certain amount of knowledge, but other training which will make of them trustworthy, self-sustaining members of society.

If we are to have unity of ideals and purposes in teachers, we must have unity of ideals and purposes in boards of education, who will make the teacher comfortable in the thought that he earns every dollar that he gets and many more than the local board is able to pay him, and that his calling is the noblest profession of all.

But even if boards of education were made up of ideal members fully qualified for their responsibilities, there is still another element that must be placated—the public.

No board of education, nor any other board elected by the popular vote, can go much faster than it can carry the people—the taxpayers—along with it.

If bonds are to be issued to build fireproof, modern buildings; if money is to be put into remodeling and renewing old buildings in order to make then light, attractive, sanitary; if up-to-date seats are to supplant the badly adjusted ones; if new machinery for heating and ventilating is to take the place of the old inadequate equipment, then the taxpayer must be convinced that these things are necessary to the health and welfare of those confined in the schoolroom.

If money is spent for the medical inspection of every child in the system for defects which retard his development and hinder the work of the teacher, the taxpayer must be made to realize the benefits to accrue to the child from such inspection.

If thousands of dollars are expended each year for soap and towels in the various buildings, then the taxpayer must believe in the civilizing influence of soap and water.

If special schools for backward and defective children, separate schools for deaf, for blind, for crippled and tuberculous children are maintained out of the overburdened contingent fund, then indeed must the taxpayer know not only of the benefits that will come to the children so afflicted, but of the relief that will come to the normal child and the teacher.

In other words, a board must not only educate itself upon these points, but it must educate the public as well. If the profession of teaching is ever to receive proper financial recognition, commensurate with the years of preparation and responsibilities which it implies, parents must know the teacher at first hand, they must understand that the teacher of their child is a co-partner with themselves in the making of his character and the upbuilding of his manhood.

The Cleveland Board of Education has found that there is no better way of interesting the parents in the school problems of the city than thru the use of its buildings for free lectures and entertainments. This year, 1910 and 1911, more than two hundred are

scheduled, to which parents and patrons are invited by card. There are also about forty mothers' clubs in connection with the different elementary schools, to which speakers go upon invitation to explain any proposed innovations in school plans.

The use of school auditoriums for community meetings cannot help but bring the parent closer to the teacher. Discussions of public welfare, of patriotism and topics related to the home and school will arouse in any city a keener interest in school problems, and will bring a heartier support to the administrative board. In conclusion I want to say that it is my belief that with mutual professional confidence between boards of education and the teachers they employ, with closer relations between parents and teachers, with an intelligent understanding and co-operation between the community and its elected representatives, there can be no doubt but that an administrative board which lives up to its responsibilities may be a great aid in securing "Unity of Ideals and Purposes" in the teachers they employ.

FINAL REPORT OF THE COMMITTEE OF THE DEPARTMENT OF SUPERINTENDENCE ON A UNIVERSAL SYSTEM OF KEY NOTATION[1]

To the Department of Superintendence, National Education Association:

Your committee, appointed in 1903 to invite and join with like committees from the Modern Language Association and the American Philological Association to prepare and recommend a key alphabet for uniform use in indicating pronunciation in all our cyclopedias, dictionaries, gazetteers, text and reference books, begs leave to submit this special report at this time with the privilege of adding a supplementary report at the next meeting of the department.

We regret to be obliged to report that as yet the efforts made in accordance with your instruction in response to our report of February 25, 1909, to secure if possible the agreement of the other two societies to a compromise on the few remaining points of difference then existing between us, have not been successful. But all three committees are in such entire accord on so large a portion of the key, and your committee is so fully convinced as to the forms in the disputed cases which will most satisfactorily meet the practical, immediate demand for such a key, that it seems clearly best to lose no more time in seeking for complete harmony, so much to be desired, but that we should at once recommend for your adoption the key which in our judgment is the best solution, all things considered, of this perplexing problem possible at this time.

The key which we here submit for your approval is substantially the one contained in the Report of the Joint Subcommittee, which was distributed to the members of the Department at the Milwaukee meeting in 1905. This key was quite satisfactory to your committee, as we reported at that time. It had the cordial indorsement, indeed, it was the product, of the representatives on the joint committee of the other two societies, men of the highest standing and influence as experts in their field. But when it came up for approval in their societies changes were made which we could not indorse or advise you to indorse. On these disputed points the key we now recommend is exactly the same as in the Report of the Joint Subcommittee handed to you in 1905. However, during the subsequent years of effort to compromise on these points of disagreement, above referred to, your committee has become satisfied that the practical adoption and use of this key would be greatly facilitated by making four changes, adopting digraphs composed of present letters instead of the more ideal and logical single signs which the Joint Subcommittee, tho not without some hesitation and debate, decided to recommend. The practical advantage to be gained by these concessions so clearly outweighs the loss in theoretical consistency, in our judgment, that we do not hesitate to approve them, particularly as all the experts who prepared the alphabet in the first instance concur with us.

The key here submitted adopts the alphabet, so far as that alphabet went, recommended by the American Philological Association in 1877, under the lead of those eminent philologists Professors Whitney, March, and Haldeman, which has already gained some

[1] For record of appointment and work of this committee see Boston Volume of *Proceedings* (1903), pp. 140–41; St. Louis Volume (1904), pp. 39, 175–76; Volume for 1905, p. 158; Los Angeles (1907) *Yearbook*, p. 60; *Proceedings* of 1909, p. 163, and Boston (1910) *Yearbook*, p. 55.

headway as a pronouncing key, and which we deem it important to adhere to. Nothing could be more fatal to the success of a uniform key alphabet than to have the expert recommendations of one generation overturn or discredit those of a previous generation. In this matter steadiness and stability are of prime importance.

The other items completing this key alphabet, including the four concessions above referred to, have been adopted with the full and careful consideration and approval of several of the most eminent scholars and workers in the field of linguistic science, and they indorse this eclectic key as being the most happy combination of the scholarly and the practical which it is possible for patience and compromise to evolve from the mass of mere personal opinion or prejudice that embarrasses this subject.

The limits of this special report permit of no explanation in detail further than to say that this key provides a separate sign for each of our forty-four generally accepted sounds, not one of the signs being a distinctively new letter or having a foreign look. Excepting the last two supplementary letters, the added letters are so formed as to obviate criticism on the part of the type-maker and the practical printer, as well as to be easy to write and to connect with preceding and following letters.

The experts agree that the discrimination of sounds in this alphabet is sufficiently delicate and precise for all practical purposes. It should be noted that the last three letters are required only, and will be used only, by the lexicographers in order that they may carry out their too realistic theory that it is the dictionary's function to record the facts not merely of our precise, formal, more or less ideal speech, as approved by educated and cultured people regardless of their speech habits, but the literal facts of our ordinary rapid, or careless, or incidental colloquial utterance in which precision and distinctness are not thought of. It is important for the practical educator to realize that the sounds which these last three letters are intended to stand for are so confessedly lacking in distinctive character and quality that they cannot be clearly identified or be named. No experts attempt it. They merely describe these sounds as "obscure," or "weak," or "neutral," "tending toward *i* in *pin*" or "toward *e* in *set*," "intermediate between *a* in *art* and *a* in *am*," etc. Of course, such indefinite, indeterminate sounds, no matter how often they occur in our colloquial and hasty speech, cannot be taught to beginners in reading or be used in oral or syllabic spelling; nor is it necessary, and certainly it is not desirable, that they should be, even if it were possible. This alphabet without these last three letters is complete and fully adequate for common everyday use and for the ordinary needs of the learner and the teacher. In such use these three letters are needless and should be wholly ignored.

This key discards all diacritic marks but one, the macron, which has one invariable use, viz.: to indicate the long sound of whatever letter it is used with.

In the main this key alphabet conforms to international usage. For the pupil who should become accustomed to it the task of learning to pronounce Latin and German and most other European languages would be a comparatively small matter. The foreigner among us would find great help in a respelling of our words in this alphabet. It would furnish the primary teacher who wishes to use the phonetic method in teaching beginners to read, an authorized and complete alphabet, simple and easy for the children to learn to use, a tool never furnished to her before.

In order to have this key find its way into general use, there must, of course, be a call for it. Publishers must discover that the teachers of the country, those who come most directly in contact with the children, and who realize most fully the embarrassments and difficulties attending the use of the present diverse and complicated systems of key notation, desire and would appreciate the adoption of a simple uniform key system in all our books, and especially in our schoolbooks. Publishers cannot be expected to introduce such an improvement without feeling sure that there is a demand for it sufficient to justify the expense and risk involved in adopting it. It is for the teachers of the country to say whether such a call for a uniform key alphabet shall be clearly heard, and whether

the royal seal of the National Education Association shall be placed upon the alphabet here recommended so that it shall always remain common property, perfectly open and free for use by all who will, and leaving no ground for business jealousy to make changes in it or refuse to adopt it on the claim that some rival publisher by earlier use has pre-empted it and thus put his private stamp upon it.

Any request for information in regard to this alphabet or its use, and any suggestion that may add to the value and helpfulness of our forthcoming final report will be welcomed and carefully considered. The capitals and script forms will appear in that report.

BOSTON, MASS.
July 6, 1910

To the Department of Superintendence, National Education Association:

Last summer at Boston at our request the Board of Directors of the National Education Association permitted your committee to file with the general secretary a special report containing the key alphabet on which we had agreed, and instructed him to print and send it to all active members as soon as practicable, which was done. Also several periodicals published the alphabet. That was an advance portion of our final report and is to be taken in connection with this portion as constituting that report and will be so printed.

The mass of educated people, when they think of the matter, are agreed that one standard key to pronunciation should be used in all our books. Convenience and economy long since established a standard uniform gauge for our railroad tracks, a standard uniform keyboard for our typewriting and typesetting machines, a standard thread for our bolts, pipes, etc. In a matter so important to the comfort and convenience of so many of us, particularly teachers and children, as the quick and correct apprehension of the signs of pronunciation, diversity in those signs as used in any of our books should no more be tolerated than would diversity in any of the products above referred to. Today any nut which you may chance to pick up will fit any bolt that you may find of the same diameter. A typist is at home on the universal keyboard of any of the standard typewriters, and the typesetting machines are adopting the same keyboard. In the same way the public good demands uniformity in our system of indicating pronunciation, so that when we have mastered the key in one book we shall know it in all books, whether dictionaries, cyclopedias, spelling books, reading books, or what not, and no matter who made them.

Professor George Hempl, of Leland Stanford Jr. University, formerly of Michigan University, one of the foremost linguistic scholars and dictionary workers of the world, very cogently put the case thus in discussing this very alphabet at the Louisville meeting of this Department in February, 1906:

> The movement [to adopt a uniform key notation] originated in the minds of members of this Association, and in response to a great need felt by all practical teachers. No one or two dictionaries now hold the field and wield authority. The growth of scholarship and the development of the English-speaking world have demanded and made possible the preparation and sale of many good dictionaries. These have different systems of indicating pronunciation. When it is necessary to look up a word and compare authorities, the searcher is at once confronted by the task of deciphering and interpreting the various letters and diacritic marks employed, and these are so different and so differently used in the various dictionaries that it is often almost impossible to find out and remember what the authorities have to say on the subject. If teachers and other adult users of dictionaries find this process beset with difficulty, what must it be to the children in our schools? How serious this matter is and how real the trouble, one may estimate when he learns that practical dictionary workers, the men who make dictionaries and are daily employed upon them and who are supposed to know the different systems thoroly, constantly find themselves misinterpreting and confusing the signs employed.

Professor Calvin Thomas, of Columbia University, chairman of the joint subcommittee which prepared the report and the alphabet distributed to you at our Milwaukee meeting in February, 1905, thus stated the situation:

We need, the world needs, now, without further waiting, an adequate, simple, precise, unambiguous, and generally accepted notation for the sounds of the English language; a notation that we can teach to the young in school, thereby training their vocal organs and leading them to pronounce the language more accurately and more intelligently; a notation that will at the same time facilitate our learning of foreign languages and the learning of English by foreigners; a notation, finally, that will enable the educated adult to consult whatever good dictionary comes to hand and find out how the word is pronounced without referring to a special and peculiar "key to pronunciation."

It is highly improbable that uniformity in our system of indicating pronunciation would ever come about by the spontaneous agreement of rival publishers. Here is a practical key, based on the essential principle, one letter one sound, the product of the foremost language students of our country, and pronounced by leading expert lexicographers to be without an equal in scholarly and working qualities. This alphabet cannot be copyrighted or claimed by any publisher and therefore will be absolutely free to all. If it receives the indorsement of this body, representing the working, controlling, practical force in the field of education, your committee believes that it will be adopted in due time by all of our publishers of dictionaries, gazetteers, cyclopedias, and textbooks. Indeed, upon the appearance of our special report of last July, the publishers of one of our leading dictionaries, then in the process of revision, who had devised an entirely new pronouncing key of their own, the types for which had all been cast, threw away this new type and the pages already set, and started in anew, using this alphabet as their key to indicate pronunciation. This in itself is a good start for this alphabetic key.

The attention of your committee as practical men thru these years of labor was concentrated on the practical features of the alphabet we were working for; i.e., on the specific signs for the forty-four distinct and recognized elementary sounds of our speech. In the July installment of this report, in order to meet the desire of experts, special letters were submitted at the end of our recommended alphabet to represent the weak or obscure vowel sounds; but it does not seem wise to recommend alone these special letters for ordinary use in re-spelling to show pronunciation. These weak sounds are so indefinite and elusive that they do not need to be taught as separate sounds, for if the beginning learner is trained to place accent and emphasis properly the weakening of the unstressed vowel will follow naturally, if not inevitably. If there is occasion to indicate these neutral sounds, it may be done as well and as simply and clearly by placing the circumflex beneath the letter the sound of which is obscured, the ends of the circumflex turned down to indicate a weakening tending toward *u* in *but*, and turned up to indicate a weakening tending toward *i* in *pit*. This device was introduced by Professor March many years ago and has been in constant use. Its distinctive and obvious merit is that it does not conceal the proper and correct spelling of a word by substituting a sign of indefiniteness in place of the regular and proper letter. The adding of this alternative mode of indicating the neutral vowel, leaving each user to make his own choice, will satisfy both those who wish to use special symbols, and likewise those, possibly the larger number, who would avoid adding to this simple alphabet extra or superfluous letters.

Your committee recommends for your adoption the following:

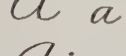
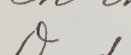
PHONETIC KEY ALPHABET

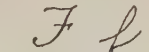
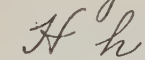
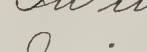
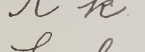
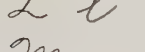
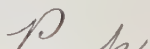
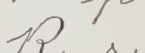
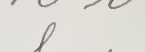
N.B.—The name of a vowel is its sound uttered distinctly. The systematic name of an explosive consonant and of *h*, *y*, and *w* is its sound followed by *ĭ;* of any other consonant, its sound preceded by *e*. In the case of five consonants, however, the common names are submitted as optional.

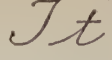
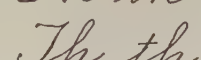
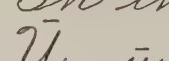
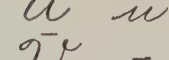
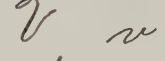
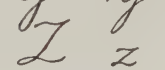
In the digraphs ch, sh, th, th the component letters should not be thought of or named. They are tied together expressly to indicate that the combinations are to be recognized invariably as single characters, as units, a habit more easily acquired by children brought up on the new alphabet than by adults obsessed by the old. The character ch, for instance, is not to be thought of or called c h, but as a single sign named chī. So of the others. In the script digraphs there is the same need of the ligature; but it would necessitate an additional stroke of the pen and is therefore omitted, the letters being clearly joined at the base.

Philologists agree that it is best to use the same letter for a short vowel and its long in ordinary print, distinguishing them by a diacritic only when it is especially necessary to indicate precision.

The capital letters for ch, sh, th, th serve well in the ordinary initial position. But when the entire word is to be printed in capitals it is probable that digraphs consisting wholly of upper case forms will be preferred, like our present Æ and Œ.

Roman		Script	Names	Key-words
ā	ā			art
ɑ	ɑ			artistic
ɑi	ɑi			aisle, find
ɑu	ɑu			out, thou
Ā	ā			air
A	a			at
B	b		bī	be
Ch	ch		chī	chew
D	d		dī	day
Ē	ē			prey
E	e			men

Roman		Script	Names	Key-words
F	f		ef	fee
G	g		gī (not jī)	go
H	h		hī	he
Ī	ī			marine
I	i			tin
Iu	iu			mute
J	j		jī (or jē)	jaw
K	k		kī (or kē)	kin
L	l		el	let
M	m		em	met
N	n		en	net
Ŋ	ŋ		eŋ	sing
Ō	ō			note
O	o			poetic
Ō	ō			nor
Θ	ɵ			not
Θi	ɵi			oil
P	p		pī	pit
R	r		er (or ār)	rat
S	s		es	set
Sh	sh		esh	ship

Roman		Script	Names	Key-words
T	t		tī	ten
Th	th		eth	thin
Th	th		eth	that
Ū	ū			mood
U	u			push
Ū	ū			urge
U	u			hut
V	v		ev (or vī)	van
W	w		wī	win
Y	y		yī	yes
Z	z		ez (or zī)	zest
Ʒ	ʒ		eʒ	azure

◡ subscript indicates obscuration toward the sound of *i* in *pit*, as added, honest.

◠ subscript indicates obscuration toward the sound of *u* in *but*, as about, over.

Alternative Mode

ɑ	for a in	ask
ə	" a "	about
	" e "	over
ɪ	" i "	honest
	" e "	added

Your committee having completed to the best of its ability the work assigned to it submits this its final report and asks to be discharged.

Respectfully submitted,

Committee

E. O. Vaile, *Chairman*, Oak Park, Ill.
T. M. Balliet, New York University, New York City.
H. H. Seerley, President, State Teachers College, Cedar Falls, Ia.
Melvil Dewey, Lake Placid Club, N.Y.
Wm. H. Maxwell, Superintendent of Schools, New York City.

Mobile, Ala.
February 24, 1911

THE NATIONAL COUNCIL OF EDUCATION

CONSTITUTION*

PREAMBLE

The National Council of Education shall have for its object the consideration and discussion of educational questions of general interest and public importance, and to presentation, thru printed reports, of the substance of the discussions and the conclusions formulated. It shall be its object to reach and disseminate correct thinking on educational questions; and, for this purpose, it shall be the aim of the Council, in conducting its discussions, to define and state with accuracy the different views and theories on the subject under consideration, and, secondly, to discover and represent fairly the grounds and reasons for each theory or view, so far as to show, as completely as possible, the genesis of opinion on the subject. It shall be the duty of the Council, in pursuance of this object, to encourage from all its members the most careful statement of differences in opinion, together with the completest statement of grounds for the same. It shall further require the careful preservation and presentation of the individual differences of opinion, whenever grounds have been furnished for the same by members of the Council. It shall invite the freest discussion and embody the new suggestions developed by such discussions. Any member making such suggestion or objection may put in writing his view, and the grounds therefor, and furnish the same to the secretary for the records of the Council. It shall prepare, thru its president, an annual report to the National Education Association, setting forth the questions considered by the Council during the previous year, and placing before the Association, in succinct form, the work accomplished. It shall embody in this report a survey of those educational topics which seem to call for any action on the part of the Association. The Council shall appoint, out of its own number, committees representing the several departments of education, and thereby facilitate the exchange of opinion among its members on such special topics as demanded the attention of the profession or of the public.

ARTICLE I—MEMBERSHIP

1. The National Council of Education shall consist of one hundred and twenty members, selected from the membership of the National Education Association. Sixty of the members shall be elected by the National Council of Education, and sixty by the Board of Directors of the National Education Association.

Each body shall select ten members annually, who shall serve for six years.

2. The Council shall elect its quota of members at its regular annual meeting.

The Board of Directors of the National Education Association shall elect its quota of members at the second meeting held during the annual meeting of the National Education Association.

3. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership. All persons who have belonged to the Council shall, on the expiration of their membership from any cause whatever, except expulsion, become honorary members, with the privilege of attending its regular sessions and participating in its discussions. No state shall be represented in the Council by more than twelve members.

* As amended at San Francisco Session, July 12, 1911 (see Secretary's Minutes, p. 338).

ARTICLE II—QUALIFICATION FOR MEMBERSHIP

All members of the Council shall be either life or active members of the National Education Association.

ARTICLE III—MEETINGS

There shall be a regular annual meeting of the Council held in connection with the Department of Superintendence of the National Education Association, or at such other time and place as the Executive Committee of the Council may designate. There may be special meetings of the Council, subject to the call of the Executive Committee, but the attendance at these meetings shall be entirely voluntary. A majority of the Council shall constitute a quorum for the transaction of business at any meeting, whether regular or called; but any less number, exceeding eight members, may constitute a quorum for the transaction of business at the regular annual meeting, as defined in this article.

ARTICLE IV—THE WORK OF THE COUNCIL

The Council shall, from time to time, undertake to initiate, conduct, and guide the thoro investigation of important educational questions originating in the Council; also to conduct like investigations originating in the National Education Association, or any of its departments, and requiring the expenditure of funds.

ARTICLE V—THE APPOINTMENT OF SPECIAL COMMITTEES AND EXPERTS

In the appointment of special committees, and in the selection of writers and speakers, it shall be the privilege of the Council to appoint such experts, whether members of the Council or not, as are deemed best qualified to conduct investigations.

ARTICLE VI—OFFICERS

The officers of the Council shall be a president, vice-president, and secretary, each of whom shall serve for three years, with terms so arranged that one officer is elected annually.

It shall be the duty of the president of the Council to prepare, with the assistance and approval of the Executive Committee, such a program for the annual meeting as shall realize as fully as practicable the purposes for which the Council was organized and exists.

ARTICLE VII—STANDING COMMITTEES

1. There shall be four standing committees: an Executive Committee, a Committee on Membership, a Committee on Educational Progress, and a Committee on Investigations and Appropriations.

2. The Executive Committee shall be composed of the president of the Council and of three other members, whose terms of office shall be so arranged that one new member may be chosen each year.

3. It shall be the duty of the Executive Committee to provide an annual program by selecting, whenever feasible, subjects for investigation, and appointing committees to conduct such investigations. It shall be the duty of the Executive Committee to carry out the provisions contained in this constitution referring to volunteer and invited papers. It shall be the duty of the Executive Committee to provide a place on the program for the report of any investigation which may be ordered by the National Education Association or its departments.

4. The Committee on Membership shall be composed of the president of the Council and six other members, whose terms of office shall be so arranged that two vacancies may be filled every year.

5. There shall be appointed annually a committee of one to submit at the next meeting a report on "Educational Progress during the Past Year," in which a survey of the important movements and events in education during the preceding year is given. This committee need not be selected from the members of the Council.

6. The Committee on Investigations and Appropriations shall be composed of nine members, whose terms of office shall be so arranged that three vacancies may be filled each year. No proposal to appoint a committee to undertake an educational investagation of any kind, and no proposal to ask the Board of Directors of the Association for an appropriation for any purpose, shall be acted upon until such proposal has been referred to this Committee on Investigations and Appropriations for report.

ARTICLE VIII—THE DUTIES OF THE COUNCIL

1. It shall be the duty of the Council to further the objects of the National Education Association, and to use its best efforts to promote the cause of education in general.

2. The meetings of the Council shall be, for the most part, of a "round table" character.

ARTICLE IX—AMENDMENTS

This constitution may be altered or amended at a regular meeting of the Council, by a two-thirds vote of the members present, and any provisions may be waived at any regular meeting by unanimous consent.

By-laws not in violation of the constitution may be adopted by a two-thirds vote of the Council.

OFFICERS, STANDING COMMITTEES, MEMBERS

OFFICERS FOR 1911–12

CHARLES H. KEYES	New York, N.Y.	*President*	Term expires in 1913
WILLIAM M. DAVIDSON	Washington, D.C.	*Vice-President*	Term expires in 1912
ROBERT J. ALEY	Orono, Me.	*Secretary*	Term expires in 1914

EXECUTIVE COMMITTEE

THE PRESIDENT, *ex officio, chairman*

ELMER ELLSWORTH BROWN	New York, N.Y.	Term expires in 1912
JOSEPH SWAIN	Swarthmore, Pa.	Term expires in 1913
JAMES M. GREENWOOD	Kansas City, Mo.	Term expires in 1914

COMMITTEE ON MEMBERSHIP

THE PRESIDENT, *ex officio*

AUGUSTUS S. DOWNING	Albany, N.Y.	Term expires in 1912
CARROLL G. PEARSE	Milwaukee, Wis.	Term expires in 1912
ELMER ELLSWORTH BROWN	New York, N.Y.	Term expires in 1913
ROBERT J. ALEY	Orono, Me.	Term expires in 1913
JAMES Y. JOYNER	Raleigh, N.C.	Term expires in 1914
JAMES M. GREENWOOD, *chairman*	Kansas City, Mo.	Term expires in 1914

COMMITTEE ON INVESTIGATIONS AND APPROPRIATIONS

JAMES M. GREENWOOD, *chairman*	Kansas City, Mo.	Term expires in 1912
FRANK A. FITZPATRICK	Boston, Mass.	Term expires in 1912
ELMER ELLSWORTH BROWN	New York, N.Y.	Term expires in 1912
AUGUSTUS S. DOWNING	Albany, N.Y.	Term expires in 1913
LORENZO D. HARVEY	Menomonie, Wis.	Term expires in 1913
JOHN H. PHILLIPS	Birmingham, Ala.	Term expires in 1913
EDWARD T. FAIRCHILD	Topeka, Kans.	Term expires in 1914
ELLA FLAGG YOUNG	Chicago, Ill.	Term expires in 1914
Z. X. SNYDER	Greeley, Colo.	Term expires in 1914

MEMBERS

Elected by the Association | *Elected by the Council*

TERMS EXPIRE IN 1912

Thomas A. Mott, Richmond, Ind.
John H. Phillips, Birmingham, Ala.
Francis G. Blair, Springfield, Ill.
James H. Baker, Boulder, Colo.
Ellen C. Sabin, Milwaukee, Wis.
*J. A. Smith, Deland, Fla.
Charles S. Meek, Boise, Idaho
Edward T. Fairchild, Topeka, Kans.
E. E. Scribner, Ishpeming, Mich.
*Walter E. Ranger, Providence, R.I.

Ella Flagg Young, Chicago, Ill.
Edwin S. Monroe, Muskogee, Okla.
*W. H. Elson, Cleveland, Ohio
*John W. Carr, Bayonne, N.J.
Edward C. Elliott, Madison, Wis.
*Grace C. Strachan, Brooklyn, N.Y.
Adelaide S. Baylor, Indianapolis, Ind.
*Carleton, B. Gibson, Rochester, N.Y.
*C. G. Schulz, St. Paul, Minn.
*Oscar T. Corson, Columbus, Ohio

TERMS EXPIRE IN 1913

*James M. Green, Trenton, N.J.
*Augustus S. Downing, Albany, N.Y.
*George B. Cook, Little Rock, Ark.
*Stratton D. Brooks, Boston, Mass.
*Edgar H. Mark, Louisville, Ky.
*Thomas M. Balliet, New York, N.Y.
*Henry B. Brown, Valparaiso, Ind.
*William O. Riddell, Des Moines, Iowa
A. C. Nelson, Salt Lake City, Utah
Reed B. Teitrick, Harrisburg, Pa.

*William E. Hatch, New Bedford, Mass.
*Bettie A. Dutton, Cleveland, Ohio
Charles H. Keyes, New York, N.Y.
*Andrew S. Draper, Albany, N.Y.
Charles H. Judd, Chicago, Ill.
*Frank E. Parlin, Cambridge, Mass.
*Cheesman A. Herrick, Philadelphia, Pa.
*W. M. Holloway, Tallahassee, Fla.
*Thomas C. Miller, Shepherdstown, W.Va.
*Frank B. Dyer, Cincinnati, Ohio

TERMS EXPIRE IN 1914

W. E. Harmon, Helena, Mont.
David Felmley, Normal, Ill.
John R. Kirk, Kirksville, Mo.
*David B. Johnson, Rock Hill, S.C.
*Wales C. Martindale, Detroit, Mich.
Ednah A. Rich, Santa Barbara, Cal.
Arthur H. Chamberlain, Pasadena, Cal.
M. Bates Stephens, Annapolis, Md.
Jacob A. Shawan, Columbus, Ohio
James W. Crabtree, Lincoln, Nebr.

William M. Davidson, Washington, D.C.
*M. G. Brumbaugh, Philadelphia, Pa.
P. P. Claxton, Washington, D.C.
Harlan Updegraff, Washington, D.C.
O. S. Westcott, Chicago, Ill.
*Julia Richman, New York, N.Y.
Mrs. James M. Greenwood, Kansas City, Mo.
*Frank Strong, Lawrence, Kans.
*C. P. Cary, Madison, Wis.
Homer H. Seerley, Cedar Falls, Iowa

TERMS EXPIRE IN 1915

John MacDonald, Topeka, Kans.
H. B. Wilson, Decatur, Ill.
C. O. Merica, Laramie, Wyo.
S. L. Heeter, St. Paul, Minn.
Laura D. Gill, Boston, Mass.
David Starr Jordan, Stanford University, Cal.
W. R. Siders, Pocatello, Idaho
E. C. Thorndike, New York, N.Y.
*E. G. Cooley, LaGrange, Ill.
F. E. Bolton, Iowa City, Iowa

*Miss N. Cropsey, Indianapolis, Ind.
Lewis H. Jones, Ypsilanti, Mich.
*Elmer Ellsworth Brown, New York, N.Y.
*William H. Black, Marshall, Mo.
Henry Suzzallo, New York, N.Y.
Luther L. Wright, Lansing, Mich.
*George M. Philips, Westchester, Pa.
*Edmund A. Jones, Westerville, Ohio
*Ernest E. Balcomb, Greensboro, N.C.
*J. E. Burke, Boston, Mass.

TERMS EXPIRE IN 1916

*John W. Cook, DeKalb, Ill.
W. A. Brandenburg, Oklahoma City, Okla.
*Lorenzo D. Harvey, Menomonie, Wis.
Thomas H. Harris, Baton Rouge, La.
Carroll G. Pearse, Milwaukee, Wis.
C. N. Kendall, Trenton, N.J.
Ella C. Sullivan, Chicago, Ill.
*Randall Spaulding, Montclair, N.J.
*George B. Strayer, New York, N.Y.
*Frank B. Cooper, Seattle, Wash.

*Anna Tolman Smith, Washington, D.C.
Payson Smith, Augusta, Me.
*James H. Van Sickle, Springfield, Mass.
James A. Barr, Stockton, Cal.
James Y. Joyner, Raleigh, N.C.
Robert J. Aley, Orono, Me.
*Charles E. Chadsey, Denver, Colo.
*David Snedden, Boston, Mass.
J. Stanley Brown, Joliet, Ill.
A. E. Winship, Boston, Mass.

*Not present at annual meeting, 1911.

Elected by the Association

TERMS EXPIRE IN 1917

*WILLIAM H. BARTHOLOMEW, Louisville, Ky.
FRANK A. FITZPATRICK, Boston, Mass.
WILLIAM B. OWEN, Chicago, Ill.
E. ORAM LYTE, Millersville, Pa.
JAMES M. GREENWOOD, Kansas City, Mo.
*MRS. ESTELLE REEL MEYER, Washington, D.C.
A. J. MATTHEWS, Tempe, Ariz.
*JULIUS I. FOUST, Greensboro, N.C.
*W. T. CARRINGTON, Springfield, Mo.
*WILLIAM P. BURRIS, Cincinnati, Ohio

Elected by the Council

W. J. KERR, Corvallis, Ore.
*JOSEPH SWAIN, Swarthmore, Pa.
*NATHAN C. SCHAEFFER, Harrisburg, Pa.
*BEN BLEWETT, St. Louis, Mo.
*Z. X. SNYDER, Greeley, Colo.
*JOHN W. ABERCROMBIE, University, Ala.
E. C. MOORE, New Haven, Conn.
G. W. A. LUCKEY Lincoln, Nebr.
*JOHN A. WOOD, South Bend, Ind.
*D. B. PARKINSON, Carbondale, Ill.

HONORARY MEMBERS

JANE ADDAMS, Chicago, Ill.
EDWIN A. ALDERMAN, Charlottesville, Va.
SARAH LOUISE ARNOLD, Boston, Mass.
JAMES B. ASWELL, Natchitoches, La.
BROWN AYRES, Knoxville, Tenn.
CLIFFORD W. BARNES, Lake Forest, Ill.
EARL BARNES, Philadelphia, Pa.
ALFRED BAYLISS, Macomb, Ill.
ALEXANDER GRAHAM BELL, Washington, D.C.
D. BEMIS, Spokane, Wash.
IDA C. BENDER, Buffalo, N.Y.
THOMAS W. BICKNELL, Providence, R.I.
ALMA L. BINZEL, Winona, Minn.
RICHARD G. BOONE, Los Angeles, Cal.
DAVID R. BOYD, Norman, Okla.
ALBERT G. BOYDEN, Bridgewater, Mass.
ANNA C. BRACKETT, New York, N.Y.
JOHN E. BRADLEY, Randolph, Mass.
EDWARD BROOKS, Philadelphia, Pa.
WILLIAM L. BRYAN, Bloomington, Ind.
MATTHEW H. BUCKHAM, Burlington, Vt.
NICHOLAS MURRAY BUTLER, New York, N.Y.
DAVID N. CAMP, New Britain, Conn.
OSCAR H. COOPER, Abilene, Tex.
WILLIAM J. CORTHELL, Gorham, Me.
E. W. COY, Cincinnati, Ohio
O. J. CRAIG, Missoula, Mont.
EDWIN B. CRAIGHEAD, New Orleans, La.
CHARLES DEGARMO, Ithaca, N.Y.
ROBERT E. DENFELD, Duluth, Minn.
JOHN DEWEY, New York, N.Y.
V. C. DIBBLE, Charleston, S.C.
KATHARINE E. DOPP, Chicago, Ill.
JOHN J. DOYNE, Little Rock, Ark.
CHARLES W. ELIOT, Cambridge, Mass.
WILLIAM W. FOLWELL, Minneapolis, Minn.
JAMES A. FOSHAY, Los Angeles, Cal.
WILLIAM K. FOWLER, Lincoln, Nebr.
H. B. FRISSELL, Hampton, Va.
R. B. FULTON, Miller School P.O., Va.
CHARLES B. GILBERT, Englewood, N.J.
AARON GOVE, Denver, Colo.
LEWIS C. GREENLEE, Denver, Colo.
JAMES C. GREENOUGH, Westfield, Mass.
MRS. EDWIN C. GRICE, Philadelphia, Pa.
W. N. HAILMANN, Cleveland, Ohio
G. STANLEY HALL, Worcester, Mass.
PAUL H. HANUS, Cambridge, Mass.
WALTER L. HERVEY, New York, N.Y.
ALBERT ROSS HILL, Columbia, Mo.
J. GEORGE HODGINS, Toronto, Can.
JAMES H. HOOSE, Los Angeles, Cal.
GEORGE H. HOWISON, Berkeley, Cal.
JAMES L. HUGHES, Toronto, Can.
THOMAS HUNTER, New York, N.Y.
ELLEN HYDE, Farmington, Mass.
EDMUND J. JAMES, Champaign, Ill.
R. L. JONES, Nashville, Tenn.
CHARLES M. JORDAN, Minneapolis, Minn.
E. S. JOYNES, Columbia, S.C.
DAVID L. KIEHLE, Portland, Ore.
WILLIAM F. KING, Mt. Vernon, Iowa
HENRY M. LEIPZIGER, New York, N.Y.
LIVINGSTON C. LORD, Charleston, Ill.
JAMES MACALISTER, Philadelphia, Pa.
JAMES A. MACLEAN, Moscow, Idaho
FRANCIS A. MARCH, Easton, Pa.
GEORGE H. MARTIN, West Lynn, Mass.
WILLIAM H. MAXWELL, New York, N.Y.
CHARLES MCKENNY, Milwaukee, Wis.
CHARLES A. MCMURRAY, DeKalb, Ill.
I. C. MCNEILL, Harrisburg, Pa.
JESSE F. MILLSPAUGH, Los Angeles, Cal.
HENRY C. MORRISON, Concord, N.H.
WILLIAM A. MOWRY, Hyde Park, Mass.
MARY E. NICHOLSON, Indianapolis, Ind.
JOHN W. OLSEN, St. Paul, Minn.
JOHN M. ORDWAY, New Orleans, La.
WARREN D. PARKER, Pasadena, Cal.
JOHN B. PEASLEE, Cincinnati, Ohio
JOSIAH L. PICKARD, Cupertino, Cal.
EDWARD T. PIERCE, Los Angeles, Cal.
JAMES R. PRESTON, Jackson, Miss.
JOHN T. PRINCE, West Newton, Mass.
GEORGE J. RAMSEY, Danville, Ky.
MRS. ELLOR C. RIPLEY, Boston, Mass.
H. J. ROGERS, Albany, N.Y.
WILLIAM D. RUFFNER, Lexington, Va.
JAMES E. RUSSELL, New York, N.Y.
HENRY SABIN, Des Moines, Iowa
J. G. SCHURMAN, Ithaca, N.Y.
H. E. SHEPARD, Baltimore, Md.
IRWIN SHEPARD, Winona, Minn.
CHARLES R. SKINNER, New York, N.Y.
EULER B. SMITH, LaGrange, Ga.
HENRY SNYDER, Jersey City, N.J.
J. LANCASTER SPALDING, Peoria, Ill.
EDWIN E. SPARKS, State College, Pa.

* Not present at annual meeting, 1911

Homer D. Sprague, Newton, Mass.
Lucia Stickney, Cleveland, Ohio
Grace Bibb Sudborough, Omaha, Nebr.
William S. Sutton, Austin, Tex.
John Swett, Martinez, Cal.
A. R. Taylor, Decatur, Ill.
W. R. Thigpen, Savannah, Ga.
John G. Thompson, Fitchburg, Mass.
L. S. Thompson, Jersey City, N.J.
William O. Thompson, Columbus, Ohio
Charles F. Thwing, Cleveland, Ohio
B. W. Torreyson, Little Rock, Ark.
Julia S. Tutwiler, Livingstone, Ala.
Charles C. Van Liew, Moscow, Idaho
Jasper N. Wilkinson, Muskogee, Okla.
Delia L. Williams, Delaware, Ohio
John W. Withers, St. Louis, Mo.
Lightner Witmer, Philadelphia, Pa.
Harry K. Wolfe, Lincoln, Nebr.
L. E. Wolfe, Memphis, Tenn.
Calvin M. Woodward, St. Louis Mo.

DECEASED MEMBERS

Robert Allen.....1894
Israel W. Andrews.....1888
Joseph Baldwin.....1899
Henry Barnard.....1900
William N. Barringer...1907
Newton Bateman.....1897
William C. Bates.....1909
Reuben S. Bingham.....1902
George P. Brown.....1910
John T. Buchanan.....1908
J. E. Burke.....1910
Norman A. Calkins.....1895
James H. Canfield.....1909
Aaron L. Chapin.....1892
Clara Conway.....1904
J. L. M. Curry.....1902
N. R. H. Dawson.....1895
John W. Dickinson.....1901
Larkin Dunton.....1890
John Eaton.....1906
W. R. Garrett.....1903
Daniel C. Gilman.....1909
Samuel S. Greene.....1883
John M. Gregory.....1898
George T. Fairchild.....1901
Daniel B. Hagar.....1896
R. H. Halsey.....1907
John Hancock.....1891
William R. Harper.....1906
William T. Harris.....1909
William D. Henkle.....1882
Edwin C. Hewitt.....1905
Elnathan E. Higbee.....1889
Frank A. Hill.....1903
Burke A. Hinsdale.....1900
Ira C. Hoitt.....1905
George Howland.....1892
John S. Irwin.....1901
Henry N. James.....1901
H. S. Jones.....1900
Thomas Kirkland.....1898
Albert G. Lane.....1906
Merrick Lyon.....1888
Albert P. Marble.....1906
James McCosh.....1894
Charles D. McIver.....1906
Thomas J. Morgan.....1902
Lemuel Moss.....1905
M. A. Newell.....1893
Birdsey G. Northrop....1898
Theodore B. Noss.....1909
Edward Olney.....1886
Gustavus J. Orr.....1888
Francis W. Parker.....1902
S. S. Parr.....1900
W. H. Payne.....1907
Selim H. Peabody.....1902
William F. Phelps.....1907
John D. Philbrick.....1885
M. S. Cooper Poucher...1900
William B. Powell.....1904
Ellen H. Richards.....1911
Zalmon Richards.....1890
Andrew J. Rickoff.....1899
Charles C. Rounds.....1901
Albert Salisbury.....1911
Edward R. Shaw.....1903
William E. Sheldon.....1900
Edgar A. Singer.....1909
James A. Smart.....1900
F. Louis Soldan.....1908
J. W. Stearns.....1909
R. W. Stevenson.....1893
Thomas B. Stockwell....1906
Eli T. Tappan.....1908
Horace S. Tarbell.....1904
Charles O. Thompson...1885
H. S. Thompson.....1904
Arnold Tompkins.....1906
Emerson E. White.....1902
James P. Wickersham....1891
S. G. Williams.....1900
J. Ormond Wilson.....1911

SECRETARY'S MINUTES

OFFICERS

President—Charles H. Keyes, executive secretary of the Committee on Safety of the city of New York..... New York, N.Y.
Vice-President—William M. Davidson, superintendent of schools.....Washington, D.C.
Secretary—Robert J. Aley, president of the University of Maine.....Orono, Me.

FIRST SESSION—Saturday Forenoon, July 8, 1911

The Council met in the Colonial Ballroom, Hotel St. Francis, San Francisco, Cal. and was called to order at 9:30 A.M. by President Charles H. Keyes.

John W. Carr, secretary of the Council, being absent, Robert J. Aley, Orono, Me., was appointed to fill the vacancy.

President Keyes made the introductory address, in which he outlined a policy for the future of the Council. His address and recommendations were referred to the following committee:

J. Stanley Brown, Joliet, Ill. E. T. Fairchild, Topeka, Kans.
John R. Kirk, Kirksville, Mo. Carroll G. Pearse, Milwaukee, Wis.
Robert J. Aley, Orono, Me.

James M. Greenwood, Kansas City, Mo., presented the "Report of the Committee on Moral Education."

The report was discussed by John MacDonald, Topeka, Kans.; Thomas A. Mott, Richmond, Ind.; J. W. Crabtree, Lincoln, Nebr.; Mrs. L. K. Burke, San Francisco, Cal.; A. C. Nelson, Salt Lake City, Utah; J. F. Millspaugh, Los Angeles, Cal.; M. P. E. Groszmann, Plainfield, N.J.; Charity Dye, Indianapolis, Ind.; Mrs. Fannie Fern Andrews, Boston, Mass.; Frank H. Fitzpatrick, Boston, Mass.; George A. Coe, New York, N.Y., and Cree T. Work, Fort Morgan, Colo.

E. T. Fairchild, state superintendent of public instruction of Kansas, presented to the Council the impress of an expert study of the problems of rural education. He moved that a committee of eleven be appointed to investigate the present condition of rural schools and make recommendations for their improvement. The movement received the unanimous vote of the members of the Council. The Chair appointed the following committee:

Edward T. Fairchild, Topeka, Kans. Thomas H. Harris, Baton Rouge, La.
L. H. Bailey, Ithaca, N.Y. John R. Kirk, Kirksville, Mo.
Henry C. Morrison, Concord, N.H. Edward Hyatt, Sacramento, Cal.
A. C. Nelson, Salt Lake City, Utah Luther L. Wright, Lansing, Mich.
Edward C. Elliott, Madison, Wis. James Y. Joyner, Raleigh, N.C.
Adelaide Steele Baylor, Indianapolis, Ind. *Charles H. Keyes, New York, N.Y.

SECOND SESSION—Saturday Afternoon, July 8, 1911

The general topic for this session was, "The Improvement of Teachers in Service in City Schools." The discussion of this topic was opened by Harlan Updegraff, specialist in school administration, Bureau of Education, Washington, D.C. The general discussion was participated in by Carroll G. Pearse, Milwaukee, Wis.; Edwin S. Monroe, Muskogee, Okla.; John R. Kirk, Kirksville, Mo.; William M. Davidson, Washington, D.C.; and James M. Greenwood, Kansas City, Mo.

THIRD SESSION—Saturday Evening, July 8, 1911

Chairman J. Stanley Brown, of the Committee on the President's Address, reported as follows:

Your committee concurs in the recommendation of the President of the Council, and recommends the appointment of a committee of five to study and report upon tests of standards of efficiency in schools and school systems.

Your committee further recommends that the constitution of the Council be so changed as to provide for the annual meeting of the Council at the time and place of the meeting of the Department of Superintendence, or some other time and place fixed by the Executive Committee of the Council.

This report was unanimously adopted, and the same committee was asked to report the proper changes in the constitution.

This session of the Council was a joint meeting with the Religious Education Association, and was devoted to a further discussion of the moral phases of public education. Addresses were made by George A. Coe, professor in the Union Theological Seminary, New York City; David Starr Jordan, president of Leland Stanford Junior University, and Charles E. Rugh, associate professor of education, University of California, Berkeley, Cal.

Upon proper motion, the report of the Committee on Moral Education was adopted and ordered printed, together with the addresses and papers given at the morning and evening sessions.

* Added to the Committee by vote of the Council.

FOURTH SESSION—MONDAY FORENOON, JULY 10, 1911

The President appointed Francis G. Blair, of Springfield, Ill., to act for Elmer Ellsworth Brown, and S. L. Heeter, of St. Paul, Minn., to act for Augustus S. Downing on the Committee on Membership.

The general topic for the session was, "High-School Preparation of Candidates for Normal-School Training."

The discussion was opened by David Felmley, president of the State Normal University, Normal, Ill., and John R. Kirk, president of the State Normal School, Kirksville, Mo. The general discussion was entered into by John H. Phillips, Birmingham, Ala.; W. E. Harmon, Helena, Mont.; Mrs. James M. Greenwood, Kansas City, Mo.; Jacob A. Shawan, Columbus, Ohio; Homer H. Seerley, Cedar Falls, Iowa; J. Stanley Brown, Joliet, Ill.; T. L. Heaton, San Francisco, Cal.; John Shoup, Chicago, Ill., and Charles H. Keyes, New York, N.Y.

Upon motion it was decided that the topic "High-School Preparation of Candidates for Normal-School Training" was worthy of further study. Vice-President William M. Davidson was asked to name a committee for this purpose. He named the following persons:

David Felmley, Normal, Ill.
John H. Phillips, Birmingham, Ala.
John R. Kirk, Kirksville, Mo.
Jacob A. Shawan, Columbus, Ohio
Homer H. Seerley, Cedar Falls, Iowa
J. Stanley Brown, Joliet, Ill.
*William M. Davidson, Washington, D.C.

Dr. W. A. Evans, of Chicago, representing the American Medical Association, presented a resolution from that body asking that the Council appoint a committee to act with the American Medical Association for the consideration and study of problems relating to public health.

Upon motion, it was decided to appoint such a committee, and the following persons were named by the Chair:

Thomas D. Wood, New York, N.Y., *Chairman*
David Starr Jordan, Stanford University, Cal.
Jacob A. Shawan, Columbus, Ohio
John F. Keating, Pueblo, Colo.
William H. Allen, New York, N.Y.
William H. Burnham, Worcester, Mass.
Clark W. Hetherington, Chicago, Ill.
P. P. Claxton, Washington, D.C.
A. E. Winship, Boston, Mass.

FIFTH SESSION—WEDNESDAY FORENOON, JULY 12, 1911

By unanimous vote the Council adopted the constitution as printed just preceding these minutes.

The following report of the Committee on Membership was adopted:

ROBERT J. ALEY, Orono, Me., *Secretary*.....Term expires 1914
JAMES M. GREENWOOD, Kansas City, Mo., Executive Committee....Term expires 1914
JAMES Y. JOYNER, Raleigh, N.C., Committee on Membership.....Term expires 1914
JAMES M. GREENWOOD, Kansas City, Mo., Committee on Membership.Term expires 1914
Z. X. SNYDER, Greeley, Colo., Committee on Investigations and Appropriations.....Term expires 1914
ELLA FLAGG YOUNG, Chicago, Ill., Committee on Investigations and Appropriations.....Term expires 1914
EDWARD T. FAIRCHILD, Topeka, Kans., Committee on Investigations and Appropriations.....Term expires 1914

MEMBERS

TERMS TO EXPIRE IN 1917

W. J. Kerr, Corvallis, Ore., to succeed himself.
Joseph Swain, Swarthmore, Pa., to succeed himself.
Nathan C. Schaeffer, Harrisburg, Pa., to succeed himself.
Ben Blewett, St. Louis, Mo., to succeed himself.

* Added by vote of the Council.

Z. X. Snyder, Greeley, Colo., to succeed himself.
John W. Abercrombie, University, Ala., to succeed himself.
E. C. Moore, New Haven, Conn., to succeed B. W. Torreyson, Little Rock, Ark.
G. W. A. Luckey, Lincoln, Nebr., to succeed himself.
John A. Wood, South Bend, Ind., to succeed himself.
D. B. Parkinson, Carbondale, Ill., to succeed himself.

TERMS TO EXPIRE IN 1912

E. C. Elliott, Madison, Wis., to succeed Albert Salisbury, Whitewater, Wis. (deceased).
Ellen C. Sabin, Milwaukee, Wis., to succeed Charles C. Van Liew, Chico, Cal.
Charles S. Meek, Boise, Idaho, to succeed James A. MacLean, Moscow, Idaho.
E. E. Scribner, Ishpeming, Mich., to succeed Alfred Bayliss, Macomb, Ill.

TERM TO EXPIRE IN 1913

Charles H. Judd, Chicago, Ill., to succeed Clifford W. Barnes, Lake Forest, Ill.

TERMS TO EXPIRE IN 1914

P. P. Claxton, Washington, D.C., to succeed L. E. Wolfe, Memphis, Tenn.
Ednah A. Rich, Santa Barbara, Cal., to succeed Ellen H. Richards, Boston, Mass. (deceased).

TERMS TO EXPIRE IN 1915

Henry Suzzallo, New York, N.Y., to succeed Nicholas Murray Butler, New York, N.Y.
H. B. Wilson, Decatur, Ill., to succeed Alma L. Binzel, Winona, Minn.
Laura D. Gill, Boston, Mass., to succeed Charles McKenny, Milwaukee, Wis.
E. C. Thorndike, New York, N.Y., to succeed William H. Maxwell, New York, N.Y
E. F. Bolton, Iowa City, Iowa, to succeed H. J. Rogers, Albany, N.Y.

TERMS TO EXPIRE IN 1916

Payson Smith, Augusta, Me., to succeed William S. Sutton, Austin, Tex.
James A. Barr, Stockton, Cal., to succeed Thomas Bailey, Memphis, Tenn.
A. E. Winship, Boston, Mass., to succeed R. L. Jones, Nashville, Tenn.
W. A. Brandenburg, Oklahoma City, Okla., to succeed D. R. Boyd, Norman, Okla.
T. H. Harris, Baton Rouge, La., to succeed E. B. Craighead, New Orleans, La.
C. N. Kendall, Trenton, N.J., to succeed Henry Snyder, Jersey City, N.J.

"Needed Adjustment of Relations between Secondary Schools and Colleges" was the general subject for the morning session. The subject was presented by Robert J. Aley, Orono, Me.; G. W. A. Luckey, Lincoln, Nebr., and Otis W. Caldwell, Chicago Ill. Clarence D. Kingsley, New York, N.Y.; Harvey N. Davis, Cambridge, Mass.; Arthur H. Chamberlain, Berkeley, Cal.; Adelaide Steele Baylor, Indianapolis, Ind.; W. J. Kerr, Corvallis, Ore.; H. E. Slaught, Chicago, Ill.; J. Stanley Brown, Joliet, Ill., and Charles H. Keyes, New York, N.Y., made valuable contributions to the general discussion.

Upon motion, the Council voted that the Committee on Investigations and Appropriations recommend to the Board of Directors that the sum of $500 be appropriated to Chairman James H. Baker and his Committee on Economy of Time in Education.

The chairman appointed the following Committee on Tests and Standards of Efficiency in Schools and School Systems:

Henry Suzzallo, New York, N.Y., *Chairman*
E. C. Elliott, Madison, Wis.
William H. Maxwell, New York, N.Y.
James H. Van Sickle, Springfield, Mass.
Edward L. Thorndike, New York, N.Y.
J. E. Cubberly, Stanford University, Cal.

The Council adjourned at 12:45 P.M.

ROBERT J. ALEY, *Secretary*

PAPERS AND DISCUSSIONS

INTRODUCTORY STATEMENT BY THE PRESIDENT OF THE COUNCIL

CHARLES H. KEYES, EXECUTIVE SECRETARY, COMMITTEE ON SAFETY OF THE CITY OF NEW YORK, NEW YORK, N.Y.

With the final disposition of the report of the Committee on Moral Education at this session the way is clear to take up a new piece of work. The President begs to suggest to the Council a service for which there is a very pressing demand. In every department of commercial and industrial enterprise the successful owners and managers are addressing themselves to the task of scientifically determining the efficiency of their materials, processes, and agents. The elasticity of steel, the crushing resistance of stone, the fire resistance of cement, the color persistence in silk, the financial economy of a machine, the absence of waste motions in operatives: all these are being subjected to scientific testing.

In the field of social service we have entered upon the business of determining rationally the efficiency of the agents and methods we employ. Financial costs, time economies, mortality rates, health conditions, water purity, restriction of contagion: all these are being rationally measured by standards which have been scientifically determined and generally accepted.

In education we have made a feeble beginning. We have seen a few endeavors to "expert" school systems when hostile criticism arises. In the East the investigations in Montclair, in Baltimore, and in New York City are examples. It is important to note the procedure and how radically it differs from the efficiency testing of commercial and industrial enterprises. It amounts simply to bringing in one or more doctors of education from the outside, whose long experience, strong scholarship, and high standing are supposed to qualify them as experts to pass upon the work of the doctor of education in charge of the system, who is also accredited with being an expert. The result is valuable as an expression of expert opinion, especially when the three or four experts are agreed. But the educational expert proceeds without any scientifically established or professionally accepted standards. In the other fields we have physical, chemical, biological, and economic standards. It has been found necessary to have them. But in education we have hardly begun scientifically to measure efficiency. To the question, "What constitutes an efficient school or system of schools?" we have many more or less convincing rhetorical responses, but few scientifically proven answers. It is time to begin the work of establishing scientific standards of educational efficiency. I beg to suggest that the Council at once constitute or authorize the appointment of a

committee to begin work on the subject of Tests and Standards of the Efficiency of Schools and School Systems. Such a committee should, in the judgment of the chair, be requested to prepare a preliminary report for the next meeting of the Council and to endeavor to submit a finished report within two years.

To do this effectively will require not simply a carefully chosen committee with interest in this particular field of study and skill in its pursuit. For the perfection and justification of their findings the widest publicity and most thoro and critical discussion will be necessary. To this end their tentative and preliminary reports, as well as the final findings, should come before sessions of the Council with large attendance and generous time provision. This consideration prompts the President to call attention to a peculiar condition now confronting the Council. This is briefly set forth in a letter heretofore addressed to every member of this body and which ran as follows:

NEW YORK CITY, N.Y.
June 21, 1911

DEAR SIR: In preparing the present program of the National Council the President wrote personal letters urging attendance upon the San Francisco meeting upon every active member of the Council. The responses reinforce a conviction that has been growing upon the writer during years of service on the Committee on Membership.

The enforced absence of many valuable members is on the increase. We have to reckon with a new and rapidly spreading institution—the summer term in normal school, college, and university. These sessions make a call that amounts to a summons to professional duty with many of the men and women whom the Council cannot afford to spare from its deliberations and activities.

It has been suggested that the only remedy is to be found in modification of the By-laws of the National Council of Education so as to provide for a midwinter meeting of the Council, immediately preceding the session of the Department of Superintendence. This step can be taken on the affirmative vote of a majority of the members of the Council. It would be unwise, in the judgment of the writer, to take such action without the quite general approval not only of the members of the National Council, but also of the members of the Board of Directors of the National Education Association.

I accordingly beg to ask you to advise me whether you favor or oppose the plan to hold a session in connection with, or just in advance of, the Department of Superintendence.

Bear in mind that the adoption of this plan would not involve the necessary abandonment of the summer meeting of the Council.

Awaiting your advice, I am,

Sincerely yours,

CHARLES H. KEYES,
President

414 W. 118th Street

In response to these 164 letters of inquiry the chair has received 134 replies. Every one of these signify their approval of the proposition to hold a winter session of the Council. Nearly all indicate that in their judgment it would give us a more deliberative meeting and insure a very much larger attendance than is possible in the summer, when demands of institutions and the desire for study, as well as travel abroad, deprive us of many whose best thought we need in working out this problem. I accordingly recommend that a committee be appointed to submit at this meeting the necessary changes in the By-laws to enable us to provide for a meeting of the Council during the coming winter.

TENTATIVE REPORT OF THE COMMITTEE ON A SYSTEM OF TEACHING MORALS IN THE PUBLIC SCHOOLS

EXPLANATORY NOTE

At the Los Angeles meeting of the National Council of the National Education Association a resolution was adopted appropriating the sum of five hundred dollars, or so much thereof as might be necessary, to defray the expenses of a committee to be appointed by the president of the Council to investigate and submit a "Tentative Report on a System of Teaching Morals in the Public Schools of the United States." Some months later Joseph Swain, president of the Council, appointed the following committee:

James M. Greenwood, superintendent of schools, Kansas City, Mo., *Chairman*.
Martin G. Brumbaugh, superintendent of schools, Philadelphia, Pa.
John W. Carr, superintendent of schools, Bayonne, N.J.
William Lowe Bryan, president of Indiana University, Bloomington, Ind.
Clifford W. Barnes, chairman, International Committee on Moral Training, Chicago, Ill.

At the Washington meeting of the Department of Superintendence, 1908, three members of the committee, Superintendents Greenwood, Brumbaugh, and Carr, met and outlined the general scope of the report, assigning to each member a part as follows:

1. "Moral Education: The Problem Stated," Martin G. Brumbaugh.
2. "Moral Education thru the Agency of the Public Schools," John W. Carr.
3. "The Home and School Life," James M. Greenwood.
4. "The Relation of Moral and Religious Training, also the Status of Moral Training in the Public Schools," Clifford W. Barnes.

A part was also assigned to President Bryan, but, owing to ill health, he declined to accept the assignment. It was also agreed that Dr. Barnes should edit the whole report after the different parts had been prepared.

The committee had scarcely begun its work when, at the Cleveland meeting of the National Education Association in 1908, the appropriation of $500 was withdrawn, leaving the committee entirely without funds. The individual members were obliged to pay all expenses, even those of postage and typewriting. This greatly hampered the work of the committee and, as the members were widely scattered, made a meeting of the entire committee impracticable. So the report on the special topics which is submitted was prepared by the individual members.

A preliminary report was submitted to the Council by Chairman James M. Greenwood at the Denver meeting in 1909 in which it was stated that much work had been done by individual members of the committee and that arrangements would be made for the publication of these results and distribution to the members of the Council. On motion, the committee was continued with instructions to make a report at the next meeting in form suitable for publication in the volume of proceedings.

The individual reports were turned over by Chairman Greenwood to Dr. Barnes who was to edit the same and submit the report in final form at the Boston Meeting, 1910. About the middle of April, 1910, Chairman Greenwood wrote Superintendent Carr stating that Dr. Barnes had been unexpectedly called upon to assume political obligations of an important character and that, on account of this, it would be impossible for him to edit the reports in time for the Boston convention. Mr. Carr was then asked to edit the report and to have it ready in time to be published before the meeting of the Council, July 2, 1910. He accepted the responsibility but did not receive the different reports until the last of April.

Owing to numerous official duties it has been impossible for the editor to do more than write a brief introduction and to arrange the different parts of the report as they came from

the hands of the individual members of the committee. The general divisions of the report follow:

1. Introduction and Recommendations.
2. The Problem Stated, Martin G. Brumbaugh.
3. Moral Education thru the Agency of the Public Schools, embracing a course of moral instruction and suggestions for moral training, John W. Carr.
4. The Home and School Life, James M. Greenwood.
5. The Relation of Moral and Religious Training, Clifford W. Barnes.
6. The Status of Moral Training in the Public Schools, Clifford W. Barnes.

INTRODUCTION AND RECOMMENDATIONS

The nineteenth century was the marvel of the ages in the number and utility of mechanical inventions, in the progress of physical sciences and their application to the industries, and especially in the accumulation of wealth and the capitalistic centralization of the control of the output and distribution of the comforts and necessaries of life. The chief problem of the twentieth century is to control these gigantic energies, to bring them under the reign of law, to make them ministering servants.

Out of these new social and economic conditions arise new moral problems of great importance—problems of public health, food adulteration, individual responsibility for corporate action, exploitation of labor by capital, accidents on account of the use of high explosives and dangerous machinery, public corporations and individual rights, the boycott, the lockout, the strike, the freedom of contract, the right to labor without molestation, and many others of serious import. In addition to these new moral and social problems, there is a superabundance of old-time vice and crime—vagrancy, pauperism, drunkenness, gambling, licentiousness, divorce, fraud, theft, arson, assault, murder, and other crimes against property and persons. Disregard for law is fast becoming an American characteristic. Witness the pernicious practice of giving rebates and discriminating against shippers; the prevalence of graft, boodling, and bribery; the white-slave traffic; the circumvention and defiance of law by many corporations and other organizations; the numerous mobs, riots, white-cappings, and lynchings in different parts of the nation. These are the moral cankers, the deadly virus which, if allowed to go unchecked, poisons and destroys nations.

The chief problems of trade, government, and society as well as of individual character are ethical problems—questions of right and wrong, justice and injustice, truth and falsehood, honesty and dishonesty. The great need of the times is not so much for men with brains and money, but for men who possess common morality. We need electors who can read their ballots and officials who are capable of managing official affairs; but the greatest need is for men who will not prostitute their talents by buying the poor man's vote, bribing the weak official, or corrupting courts of justice. Much vice and crime are still due to ignorance and inefficiency, but learning and skill alone will not solve our most important economic, social, and

political problems. Along with these must be the awakening of the moral conscience, the development of moral judgment, the disposition to be guided by moral principles, and especially to apply ethical principles to the practical affairs of life.

The subject of moral education is a world-problem and is engaging the attention of all the leading nations. An epoch-making change was effected in France when according to the law of 1882 instruction in morals and civics was made compulsory in all the elementary schools of the republic. Japanese education has been practically remade since the imperial rescript of 1890. In the autumn of 1906 a number of persons met in private conference in London "to consider whether more might not be done by means of moral instruction and training in schools to impart higher ideals of conduct, to strengthen character, and to promote readiness to work together for social ends." The outcome of this meeting was the appointment of an International Committee which has investigated the subject of moral education in most civilized nations and which in 1908 submitted an elaborate report.

In the United States moral education is also receiving special attention. An American auxiliary to the International Committee on Moral Education was appointed with Dr. Nicholas Murray Butler and Dr. Clifford W. Barnes as president and secretary respectively. At the Los Angeles meeting of the National Education Association this committee was appointed to investigate the practical aspect of moral education in the United States and to report a feasible course for use in the public schools. The Character Development League is an organization which has recently been incorporated with headquarters in the city of New York. The purpose of this organization is to furnish without charge a series of character lessons for use in the public schools. The Religious Education Association is a national organization which has for one of its aims the improvement of moral instruction in the public schools. Moral education has frequently been discussed in educational meetings, has been treated in magazine articles and books, and is rapidly finding a place in the course of study in the most progressive public schools. These things are but slight indications of the national interest already manifested in this subject. The time has arrived for a general forward movement.

If we would have strong and beautiful characters in adult life, certain elemental virtues must be inculcated in childhood and youth. These the teachers should have as definitely in mind as they do the nouns and verbs in grammar or fractions in arithmetic. They must know, not only what virtues they would implant, but how they would develop them. Among these elemental virtues we would include those which are generally accepted as forming the very basis of character, such as obedience, kindness, honor, truthfulness, cleanliness, cheerfulness, honesty, respect for self and for others, helpfulness, industry, economy, power of initiative, justice, useful-

ness, patriotism, courage, self-control, prudence, benevolence, system, neatness, politeness, fortitude, heroism, perseverance, sympathy, consecration to duty, unselfishness, comradeship, patience, temperance, hopefulness, determination, and fidelity. Pupils should not only have some idea of the meaning of these virtues but they should be trained in the practice of them until they become fixed habits.

Moral education in the public schools should include a knowledge of certain duties that each child should perform. He should be taught that he owes certain things to himself, such as cleanliness, not only of person but of thought and speech; that it is his duty to take proper care of his body so that it may be healthy and grow to be large and active and strong. He should be taught that he owes it to his mind to cultivate it, to store it with knowledge, and beautiful thoughts, and to train it so that he may think accurately and act discreetly. Many of the misfortunes of life result from lack of proper thought. He should be taught that he owes much to others—hence his duties to brothers and sisters, to playmates and classmates, to teachers and other friends, to the sick and aged, to neighbors and even to strangers. As time goes on he should be taught what he owes the school, the state, and society in general and that it is his duty to begin even while a child to discharge some of these duties by obeying the rules and regulations of the school and the laws of the municipality, the state, and the nation.

Proper regard for law and properly constituted authority should be inculcated in the child from the time he enters the public school, to the end that, when he leaves it, he will continue to respect and obey the law and endeavor to have others do likewise. The public school which fails to inculcate proper regard for law and order has failed in one of its chief duties.

In order that moral instruction may not be left to chance, which frequently means neglected altogether, a tentative course is submitted as part of this report. It is recommended that such modification of this course be made as may be found necessary to meet the needs of different localities and that definite instructions be given from time to time. Such moral instruction has proven highly beneficial in France, Japan, and in almost every country where it has been tried under favorable conditions. Many teachers in this country favor such a course and moral instruction is recommended as a vital part of moral education by the International Committee appointed by Great Britain. In order that this instruction may be vital and effective, it is recommended that committees of teachers collect and collate suitable material from history, literature, daily life, and other sources to illustrate and enforce these lessons and that means be provided for publishing and distributing this material.

But instruction alone is not sufficient. Every school should be so organized and so conducted as to furnish numerous opportunities for moral training daily. The course of study, methods of discipline, the recitation, the

study period, the playground, the social life of the school should each furnish means for training and testing pupils in right habits of conduct. A moral atmosphere should pervade the entire school. The surroundings should be clean, attractive, and wholesome; the relation between teacher and pupils frank, kind, and considerate; the spirit of industry, loyalty, friendship, and helpfulness should pervade the entire school. Under such conditions moral growth on the part of the pupils is rapid and certain.

In order that there may be wholesome physical, social, and moral environment and the best examples of true manhood and true womanhood set before the children, it is imperative that the management of public schools be freed from petty personal and party politics to the end that the best persons may be selected to manage and govern the public schools. Such management will secure honest, progressive, and efficient administration and result in the employment and retention of the best teachers available.

All authorities agree that the one most potent influence for the moral education of children in the public schools is the personality of the teacher. Given a great teacher of moral power, good results will follow. Whatever the environment, the course of study, the opportunities for moral training, it is the teacher who makes the vital connection between these things and the lives of the children. It is the teacher who by patience, skill, love, and the example of a noble life is the most effective school influence in molding the character of children. In order that teachers may do their work most effectively they should be not only persons of excellent character and ability, but they should also be carefully trained, so that they may exercise their teaching powers most effectively in molding the lives of their pupils.

Proper laws for the protection of childhood are also necessary. We most heartily approve of those laws which have recently been enacted in many states for the protection of children and we urge their rigid enforcement. Among these laws we would especially commend the compulsory school attendance laws; laws prohibiting the employment of children in certain dangerous occupations and regulating their employment in many others; laws prohibiting the sale of liquor and cigarettes to minors; laws establishing juvenile courts, parental homes, and reform schools; contributory negligence laws which provide for the punishment of parents for the misconduct of their children. In many states the scope of these and similar laws needs to be extended and more adequate means provided for their enforcement. In most states more stringent laws should be enacted for the protection of female children, and for the punishment of crimes against them.

While the school can perform an important part, yet various other institutions and agencies must be employed in the moral education of children. Of these, the home must play the chief part. The home is the

nursery of childhood, and fortunate the children who have good homes. Parents are primarily responsible for the moral training of their children. Of the thousands of unfortunates who find their way annually into police courts and reform schools, practically all of them come from homes in which, for various reasons, the children are neglected. The church has an important work to do also, not only in the training of children but in educating the whole people in morality and religion. The public press, that great engine for good or evil, has its duties and responsibilities; likewise the business man, the public official—indeed each agency of society must play its part in setting up and maintaining moral standards.

James M. Greenwood, *Chairman*
Martin G. Brumbaugh
William Lowe Bryan
John W. Carr
Clifford W. Barnes
Committee

MORAL EDUCATION: THE PROBLEM STATED

M. G. BRUMBAUGH, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA, PA.

It is the spirit and purpose of our American institutions to omit the impartation of formal religious instruction in the public schools. This was the inevitable concomitant of the separation of church and state and the attendant placing of the schools under state control. But it does not follow that this secularization of the school makes it other than an essentially moral and spiritual force. While we agree that formal religious dogma is a matter apart from the school, we do not wish the school to be restrained from imparting in the most effective way that sum of virtues which we concede to lie within the domain of morality and religion. We want our pupils taught to be right as well as to think aright. Character and conduct are as essentially a product of the public school as is knowledge.

We have, in a general way, assumed that right organization of the school and splendid character in our teacher life would secure the desired result in the moral and ethical code and career of the pupil. And these agencies are most potent. They have done, and are doing now, a tremendous good. There is, perhaps, no equal group in society that makes more powerfully for right living than do the teachers in our schools. They are not only required by law to be persons of high moral character, but the nature of the service they render is such as to attract and conserve the finest characters society can produce. The moral character of the teaching body is so far above criticism that it is made the subject of emulation and eulogy by right-minded persons. Moreover, when, as is rare, any teacher is even charged with an immoral act the shock to the community reveals the deep-seated

and abiding confidence and affection of the people in the integrity of our teaching body. It is a hopeful sign that this high standard not only exists but is constantly increasing. Our teaching body is a source of gratification and of pride to our civilization.

Moreover, the school is so organized that it is essentially ethical in its entire spirit and operation. The pupil in the public school is under a system of activities that promotes not only his intellectual but also his moral and his spiritual well-being. From the moment the pupil enters the school until he completes its routine of duties he is impressed with the importance of punctuality, promptness, regularity, industry, neatness, accuracy, and kindred virtues of the moral life. He is also given to understand the importance of kindness, courtesy, conscientiousness, respect for others and for law, fair play among his fellows, and devotion to clean and noble ideals. These qualities are constructively wrought into his daily life, and, by the discipline of the school, any violation thereof is promptly and adequately punished. The entire spirit of any rightly organized school makes for a sane and splendid spiritual self.

If the school be so organized and administered as to cause these virtues to become habits; if the sanction in each case be within the spirit of the pupil and not an external force imposed upon the pupil unwillingly, the result is in every way commendable. The goal in this, as in all things, is self-directed conduct on the highest plane of spiritual excellence. When the pupil of his own will chooses to do and does the right thing, the work of the school has justified itself in the most direct way.

If, as many believe, some sanction other than its own is essential to right moral discipline, one is not obliged to choose the sanction of religion, potent as that sanction is in enforcing moral ideals and in determining moral action. To choose this sanction is to raise with many persons the question of the right of the school to use religious sanctions, altho, personally, I can see no valid objections thereto. But the school is an agency of the state, and the sanction of the state may without criticism be used to enforce moral instruction. While this sanction is less potent than that of religion, it is nevertheless of greater potency than many realize.

Moreover, it is obvious to the student of civics that there is great need now of a revival of civic integrity. If the ideals of the state are made dominant in the enforcement of moral virtues, both the state and the individual will be directly helped.

But right organization and spiritual excellence in teachers will not alone accomplish in the domain of conduct all that one visions in the spiritual uplift of childhood. Example and environment are potent but not all-embracing forces in the organization of soul-growth for the worthiest ends. The influence of environment and of example are alike conditioned upon establishing in the soul of the child an ideal or standard of excellence toward which all objective influences must trend. Guidance is effective only when

a goal is visioned. Until the child builds clearly in his own soul a standard of the manhood visioned as good by the best of his race, the point and purpose of external forces are alike negatived and wasted. For this reason it is necessary to construct in the soul of a child a standard of moral and spiritual excellence toward which all objective forces at work upon the child may move.

It is difficult to determine what, if any, formal moral content should enter the curriculum of the school; and, if admitted, how it shall be interpreted. It seems quite evident, judging from the experiences of other nations, that it is not wise to add moral data as a new and separate element in the course of study. To omit all reference to the formal presentation of moral and ethical ideals is likewise unwise. To leave the matter to the option of the teacher at favorable moments is largely to ignore it.

Under the conditions it seems best to make some inquiry into the scope of the problem, and then to set forth in some logical order the specific virtue of the higher life that the school can and should develop.

I submit the following tentative statement of the problem. This study is in part based upon Hegel's analysis of moral discipline and concludes with a question of great significance. It will be of interest to note how far along this line of analysis educators will willingly go. I make the prophecy that before a decade we shall have settled this question by including all this in the scope save only the final formal steps in absolute training in the domain of formal religion.

I wish especially to insist that the method here indicated is not only pedagogically wise but also easily achieved.

THE SCOPE AND METHOD OF MORAL AND RELIGIOUS EDUCATION

A. The Scope—To determine the limits of the problem.

I. Related Essentials. To furnish the soul with the elements of the problem.

1. The virtue of Civilization, which is politeness or courtesy.
   The problem of civilization is to secure conduct on the plane of social demand.
2. The virtue of Morality, which is conscientiousness or dependableness.
   The problem of morality is to secure conduct on the plane of thought, whence arises the function of conscience.

II. Religious Education Proper.

1. The virtue of Religion, which is humility.
   The problem of religion is to secure a recognition of the inadequacy of human guidance for conduct and to follow implicitly the guidance of the Divine.
2. Its aspects.
   (1) The theoretical training in the religious life.
      a) Nutrition of feeling—Problem of Elementary Education.
      b) Nutrition of definition—Problem of Secondary Education.
      c) Nutrition of insight—Problem of Higher Education.
   (2) The practical training.
      a) Consecration of self to one's ideals.
      b) Reconciliation of the individual with his lot.
      c) Selection of a viewpoint in life.

(3) The absolute training.
   a) Conformity to law.
   b) Investigation of the activities of the race in its effort to achieve the higher life.
   c) Selection of a creed or confession of faith.

B. The Method—To determine the process of instruction.
   1. Tell it—To solicit thought—Intellectual phase.
   2. Rhyme it—To solicit feeling—Emotional phase.
   3. Formulate it—To solicit guidance—Volitional phase.

The question or problem: How much of all this may be taught in the public schools?

From the analysis of the problem it seems possible to frame a course of lessons that any teacher can give. These lessons need not assume the form of special didactic exercises if only the teacher be wise enough to permeate the whole curriculum with the spirit of moral virtues. Whatever formal lessons are visioned as necessary may and should be given as part of the opening exercises of the school. I am strongly of the opinion that these opening minutes should give color and character to all the work of the day. To that end they should be full of the spirit of cheer, reverence, and good-will. I would recommend that a pamphlet be prepared with great care by the Department of Superintendence and a committee of teachers in each school system. This pamphlet may be formally considered by the board, and, if approved, be authorized for use in all the schools of the district.

As an outline of suggestions, governing the preparation of such a bulletin, I would commend the working-out in detail of the problems set herein, and conforming substantially to the following guiding principles:

1. Such material should not take the form of fault-finding or caprice.

2. It should not be a body of precepts, maxims, moral sentiments, or didactic mottoes.

3. It should not be negative but positive, pointing out not what to avoid so much as what to practice.

4. It should not encourage or point to morbid introspection.

5. It should not be narrow and pedantic. Its scope should reach beyond the virtues that have commercial value.

6. It must not devote itself to philosophical and theological sanctions that are either too abstract to be of value or too near the domain of prohibitive material to be admitted.

7. It should include an interesting exposition of the facts of the moral life, laying stress upon the social results of right action.

8. It should, in the more advanced grades, train the judgment by judicious questioning and personal appeal.

9. Its data should be drawn from all ages and from all nations, to the end that the moral principles may be seen to carry race-wide application.

10. It should draw its data from an unrestricted variety of sources, e.g., from the Bible, from the religious poetry of the ancients, from history, from biography, from poetry, from art, from legends and folk-lore, from current events, from science, from personal experience, and particularly from the daily life of the school.

With these guidances it is possible and desirable to formulate a list of moral and religious virtues and so to present the same to the pupils in our schools as to produce results of the greatest value.

MORAL EDUCATION THRU THE AGENCY OF THE PUBLIC SCHOOLS

JOHN W. CARR, SUPERINTENDENT OF SCHOOLS, BAYONNE, N.J.

I. MORAL INSTRUCTION IN THE PUBLIC SCHOOLS—A TENTATIVE COURSE BY GRADES

A. PRINCIPLES UNDERLYING MORAL GROWTH

Before attempting to outline a course in morals by grades, let us consider the psychological principles underlying moral growth, first giving quotations from eminent authorities.

"The depicting of worthy character, the imitating of noble example tend to make one noble. Did you never observe how imitation, beginning in early youth, at last sinks into the constitution and becomes a second nature of body, voice, and mind?"[1]

"Refuse to express a passion and it dies. Count ten before venting your anger, and its occasion seems ridiculous. Whistling to keep up courage is no mere figure of speech. On the other hand sit all day in a moping posture, sigh and reply to everything in a dismal voice, and your melancholy lingers. There is no more valuable precept in moral education than this, as all who have had experience know; if we wish to conquer undesirable emotional tendencies in ourselves, we must assiduously, and in the first instance cold bloodedly, go through the outward movements of those contrary dispositions which we prefer to cultivate. The reward of persistency will infallibly come in the fading out of the sullenness or depression, and the advent of real cheerfulness and kindliness in their stead."[2]

"Repression is not enough. A virtue must take the place of vice. . . . . Development and repression are not two things but one; all genuine development already carries in it repression of much."[3]

"The law of physical development is true of moral development. Our souls, like our bodies, grow into the modes in which they are exercised. It is by striving to act that our desires come to a fuller, more persistent and more definite development. . . . . It is by repetition of action that the corresponding desires are organized into habits."[4]

"The formation of habits requires time. Time for action and time for rest. The persevering youth may wake up some fine morning to find himself one of the capable ones of his generation or in the strong grip of some stealthy vice."[5]

"It is not by warnings, however well meant, which suggest that they are capable of evil that we can best help the young. It is by persuading them that they are capable of good that we can hope to make them good in reality. . . . . The best moral antidote lies not in warnings however particular, but in that positive nurture of character which is the real source of strength in the hour of temptation."[6]

"It is not enough to hate our failings or our vices with a perfect hatred. We must love something else. We must contrive to open mind and heart to tenants in whose presence, unwelcome intruders, unable to find a home, will torment us only for a season and at last take their departure. . . . . One way is to practice a moral hygiene by guiding our lives into places of moral health. There are social circles in which malicious feelings wither, energetic pursuits in which contact with a larger life swamps petty irritabilities, natural scenes of peace where we can no longer anchor by one gloomy thought. . . . . A favorite haunt, a tried friend, a congenial business, a well-loved book, perhaps even a chosen pastime—they are enough."[7]

[1] Plato, *Republic*, Bk. III, p. 269.
[2] James, *Psychology*, II, p. 463.
[3] MacCunn, *Making of Character*, p. 35.
[4] *Ibid.*, p. 40.
[5] *Ibid.*, p. 45.
[6] *Ibid.*, p. 164.
[7] *Ibid.*, pp. 215–16.

"If we wish to subjugate an appetite, it is not enough simply to check it. All the locks and bolts of mere repression will not suffice. Rather must we seek until we can find and foster some other desire in the presence of which the obnoxious appetite may find it hard to live. . . . . If once heart and mind be filled with strong positive interests, the rest will come of itself. For these wholesome incentives will, ever increasingly, occupy the soul, and if they be skillfully fostered, will strike up alliances with one another, till the promptings we wish to get rid of will be ousted from their squalid and knavish tendency."[1]

"Any conditions which compel the teacher to take note of failures rather than healthy growth, put the emphasis in the wrong place and result in distortion and perversion. Attending to wrongdoing ought to be an incident rather than the important phase. . . . . Interest in the community welfare is the ultimate ethical habit to which all the special school habits must be related if they are to be animated by the breath of moral life."[2]

"In true education which aims at training up honorable men and women there must be the kindling of faith in an ideal. . . . . Will power must go along with it, if delicate and intelligent feeling is to lead to prompt and vigorous action. Will power is strengthened by wise training of the body, and by the habit of working with others and for others. But if its power is to be rightly used, it needs the curb of principle and to be trained by liberty for the right use of liberty. . . . . The highest task of the school is to bear its part in the formation of character and in the imparting of a moral and spiritual ideal."[3]

The chief underlying principles of moral growth deduced from the above quotations and other authorities may be summarized as follows:

1. *Direct the fundamental instincts of children into proper channels.* Those of most importance in moral development are curiosity, play instinct, constructive instinct, imitation instinct, social instinct.

2. *Allow harmful impulses, instincts, and interests to die for lack of stimulus, or from repression, or by substituting better ones for them.* Some instincts are transitory and may early be aborted or outgrown. The best antidote for evil is the substitution of good. The mind once occupied with good, it is difficult for evil to find lodgment.

3. *Cultivate desirable emotions such as joy and sympathy and repress evil emotions such as anger, hatred, and envy.* Simulating an emotion tends to produce it whether it be joy, sorrow, or what not. To be most effective this simulation should be whole hearted. Some of the ways for repressing a passion or undesirable emotion such as anger are to take time to reflect, to gain the mastery over the body (self-control), to occupy the mind with something else.

4. *Exercise in any virtue or desirable trait of character is necessary for its development.* The time element is also very important. There must be time for action and time for rest.

Mere exhortation is not enough; there must be practice.

5. *Habits are largely acquired by imitation and suggestion.* Hence the necessity of good examples—examples furnished by parents, teachers, companies, and people in general—examples found in history and literature.

6. *Noble ideals are a potent inspiration in the formation of character.* Hence the value of biography, literature, and worthy examples of everyday life. By constantly striving to realize his ideal, Ernest came to resemble the Great Stone Face in benignity of countenance and supposed nobility of soul.

7. *A clean, healthy, well-developed, well-nourished body under good control is a powerful aid to moral development.* So important is this that all reformatories begin the work of

[1] MacCunn, *Making of Character*, pp. 34, 35.

[2] Dewey, *Ethical Principles Underlying Education*, p. 15.

[3] M. E. Sadler, *Moral Instruction and Moral Training*, I, p. xvii.

reform by first getting the body in proper condition. Hence the necessity for play, work, physical training, proper nourishment, and proper care of the body.

8. *Knowledge of what things are helpful and what are harmful is important.* Moral training should constitute the greater part of moral education, but along with this should go a certain amount of moral instruction. Ignorance is one of the chief sources of wrong-doing.

9. *Strong, positive, abiding interest in things worth while is one of the effective means of developing moral character.* Being occupied with things worth while is one of the best ways to keep out of mischief. The child or adult who acquires a genuine interest in nature, music, art, literature, or religion—yes even in athletics, or making a kite or learning a trade or conducting a business—has something that is or may be of genuine worth in developing character. "Interest in the community welfare," says Dr. Dewey, "is the ultimate ethical habit."

10. *Training for efficiency wards off many temptations as well as leads to the development of much that is good.* Wholesome labor employs the mind, exercises the body, and may be one of the best ways to ennoble the soul. One's occupation and his attitude toward his work are among the chief factors which make or mar his character. The person out of employment, or who thru inefficiency is unable to care for and support himself and those dependent upon him, is constantly tempted to do that which is wrong. Hence the importance from a moral standpoint for giving such vocational training as will aid women to care for the home properly and men to make an honest living.

B. KINDERGARTEN AND PRIMARY GRADES

In suggesting a course of morals by grades, it is not expected to cover *all* that should be done in the way of moral instruction and certainly not in the way of moral training. Opportunities occur in every school when a particular moral lesson can be taught more effectively than in a set lesson. That is *the* time for that particular lesson. The time for moral training is *all the time*, and a school fails to fulfill its highest mission if it does not contribute each day to the moral development of the children.

Of such importance is this subject that every school should be so organized and conducted as to contribute something positive and definite each day to the moral development of the children.

The chief purpose of this course is twofold:

1. To point out to teachers certain definite traits of character to be emphasized, certain habits which children should be helped to form.

2. To suggest a variety of ways in which moral instruction may be given.

The time and manner of giving instruction in morals should vary not only in the different grades but in the same grade at different times. The period for opening exercises lends itself best for most of these lessons. Such lessons give definiteness to these exercises and afford an opportunity for pupils to take part.

Sometimes the lesson will consist of an appropriate story told by the teacher, as "The Pig Brother," if the topic is cleanliness. This may be supplemented by explanatory remarks by the teachers and appropriate quotations by the pupils. At other times, in the upper grades especially, the pupils will read or relate incidents from the lives of eminent Americans, or read appropriate selections from literature, illustrating the topic under

consideration. Or there may be discussions in which teachers and pupils contribute something relative to the meaning and practical application of the topic. At other times, there will be special programs on festival and holiday occasions or in honor of the birth of some celebrated person, in which topics of morality and patriotism will receive consideration.

Teachers may find difficulty in securing proper material to illustrate these lessons. This can be obviated to some extent by carefully planning lessons and collecting and classifying material found in their general and professional reading.[1]

KINDERGARTEN

1. *Obedience.*—(Training) In following directions relative to conduct; also relative to games, marches, and other exercises.

2. *Co-operation.*—(Training) Songs, games, marches, etc.

3. *Helpfulness.*—(Training) Passing materials, putting on wraps, helping to serve luncheons, etc.

4. *Attention.*—(Training) To stories told, directions given, work to be done, part in games, etc.

5. *Motor control.*—(Training) Games, marches, paper folding, paper cutting, standing, sitting, motion songs, and free play.

6. *Kindness.*—(Instruction) Kindness to parents, teacher, and to each other. (Training) By being kind to each other and to pets.

7. *Cheerfulness.*—(Training) Singing, games, marches, other school exercises, and free play.

8. *Sociability.*—(Training) Luncheons, games, free play.

9. *Manners.*—(Instruction) How to act in their games and other exercises; how to answer persons; table manners. (Training) Luncheons, regular school exercises, free play.

NOTES.—A. Instruction given chiefly by means of stories, memory gems, and by explanations and directions given by the teachers. Teachers should remember that *showing* is more effective than telling.

B. The marches, songs, games, luncheons, free play, and much of the constructive work furnish excellent means for social training and should be fully utilized.

FIRST GRADE

1. *Follow directions.*—(Training) Marching; passing to and from seats, into and out of the room; removing and putting on wraps; passing and collecting materials; use of busy work, etc.

NOTE.—From the very first children should be taught how to follow directions and then trained in doing so until it becomes habit.

2. *Obedience.*—(Instruction) Obedience to parents and teachers. (Training) Obeying directions given in reference to conduct and school work.

3. *Cleanliness.*—(Instruction) Relative to cleanliness of body and clothing. (Training) Keep hands, face, and clothing clean.

4. *Kindness.*—(Instruction) To parents, brothers and sisters, teachers, playmates. (Training) Kindness to schoolmates and teacher.

5. *Unselfishness.*—(Training) Sharing things which belong to the children with each other; giving way for others to take part in games and sports.

[1] The Character Development League, 31 East Twenty-second Street, New York, has prepared a series of "Character Lessons" which contains exceptionally valuable material and helpful suggestions. These "Character Lessons" are furnished *free* to any principal or teacher who will put them into use in his school or class.

6. *Helpfulness.*—(Instruction) How pupils may help at home and at school. (Training) Help in leading lines; in games and sports; passing and collecting materials; erasing boards; help each other put on wraps.

7. *Self-control.*—(Training) Keeping quiet, busy work, standing in lines, sitting, marching.

8. *Motor control.*—(Training) Writing, talking, reading, phonics, gymnastics, free play.

9. *Cheerfulness.*—(Training) Stories, singing, marching, free play. The aim should be for teachers and pupils alike to be cheerful in all their work as well as play.

10. *Love of parents.*—(Instruction.)

11. *Good manners.*—(Instruction) Relative to school manners; manners at table; use of good language. (Training) School manners, reciting, speaking to the teacher, treatment of each other in the schoolroom and on playground.

NOTES.—A. Instruction to be given chiefly by explanations, directions, stories, memory gems. Showing pupils what to do and how to act is more effective than telling. Train leaders among the pupils themselves. Much greater emphasis should be put on moral training than on moral instruction.

B. While the opportunities are not so great for social training as in the kindergarten, yet teachers should avail themselves of every means to give pupils social training. Songs, marches, games, constructive work (make things for parents or friends), the festivals, parents' day, special celebrations, and luncheons should be utilized for social training.

C. The teacher should make a careful selection of stories, incidents, and quotations à propos of the topic presented.

SECOND GRADE

1. *Follow directions.*—(Training) Study, busy work, copying, silence, games, marches, passing and collecting materials.

2. *Obedience.*—(Instruction) Obedience to parents, to rules of schools, to teachers. (Training) Obeying rules and regulations of schools; directions of teacher relative to conduct, school work, manner of sitting, standing, passing to and from seats. Prompt and cheerful obedience should be required of each pupil.

3. *Cleanliness.*—(Instruction) Person, desk, floor, speech. (Training) Clothing, hands, face, shoes; desk and surroundings; speech.

4. *Truthfulness.*—(Instruction) Meaning of truthfulness; ways persons can tell truth or falsehood. (Training) Correct statements; measuring to find out truth; not guessing at answers to questions; teachers should make it easy for children to tell the truth.

5. *Helpfulness.*—(Instruction) How children may be helpful at home and at school. How they may help to keep the city clean. (Training) Remove paper from floor and yard; not throw things on floor or yard or street; not mark on furniture or fences or buildings. Help janitor by folding seats; erase blackboards; pass and collect materials, etc.

6. *Love of home.*—(Instruction.)

7. *Self-control.*—(Training) Keep quiet; refrain from crying, fighting, and use of bad language; application to study.

8. *Motor control.*—(Training) Free play, writing, drawing, sitting, standing, marching, phonics, speech.

9. *Kindness.*—(Instruction) To one another; to brothers and sisters; to parents; to animals. (Training) Kindness to each other at school. If possible each child should have some pet or animal at home to care for. Country children have a great advantage in this respect. Every child that has younger brothers or sisters should care for them part of the time. Sense of responsibility is developed in this way as well as the social qualities of kindness and helpfulness.

10. *Manners.*—(Instruction) School manners—reciting, asking and answering questions; on the playground; street manners; table manners; good manners toward older persons; good language; pleasant tones of voice. (Training) Practice good manners in schoolroom and on playground.

11. *Unselfishness.*—(Training and Instruction.)

12. *Patriotism.*—(Training) Flag salute, patriotic songs; celebration of special holidays—Thanksgiving, Lincoln's and Washington's birthdays; Memorial Day.

NOTE.—The story continues to be one of the chief means of moral instruction. See notes under First Grade.

THIRD GRADE

While the chief emphasis is still placed on moral training, yet as pupils grow older moral instruction should receive greater consideration. It is taken for granted that the school will train pupils daily in promptness, industry, obedience, kindness, cheerfulness, truthfulness, honesty, neatness, motor control, and comradeship.

1. *Honesty* and some of its rewards.

2. *Respect for others*, parents, teachers, officials, older persons, strangers.

3. *Cheerfulness.*—Advantage to self, to others. Humor has its place in the school and should be cultivated within certain bounds as one means of promoting cheerfulness.

4. *Responsibility.*—Each pupil should be held responsible for his conduct, for the care of his books and supplies, for the preparation of lessons assigned. If possible each pupil should have some home responsibilities. Certain pupils whom the teacher designates should be responsible for care of plants and the performance of some minor duties.

5. *Care of body.*—Eating, drinking, bathing, avoidance of drafts when overheated.

6. *Kindness to animals.*—("Character Lessons" furnish excellent material.)

7. *Patriotism.*—Flag salute, patriotic songs, special celebrations.

8. *Civics.*—Who own the schools, streets, roads, bridges, parks. Our part in caring for them—should not throw paper, or trash of any kind in streets, parks or on playground; should not destroy flowers, shrubs, or trees; should not mark or deface public or private property.

NOTES.—A. Pupils should begin to read for themselves as well as to have stories read to them relative to topics suggested above.

B. Associations may be formed among children of this grade, such as "Bands of Mercy" to protect birds, care for dumb animals, and civic bands to help keep streets and school grounds clean. See notes to First Grade.

FOURTH GRADE

Daily moral training should be given in obedience, industry, truthfulness, politeness, kindness, cheerfulness, honesty, neatness, motor control, helpfulness, sense of responsibility, comradeship.

1. *Self-respect.*—Qualities one must have if he would respect himself; ways one should show self-respect.

2. *Self-reliance.*—Meaning. How we may learn self-reliance.

3. *Habits.*—How formed; strength of habit. Some we should form. Kinds we should not form.

4. *Some rights and privileges of children.*

5. *Respect for rights and privileges of others.*

6. *Courtesy.*—How it may be shown to each other at school. Politeness on streets; in the presence of company.

7. *Care of the body.*—Eyes, teeth, ears. Some rules to observe in order to keep well. How to prevent spread of contagious diseases.

8. *Civics.*—Rules and regulation of schools, why made? Why should they be obeyed? Compulsory school laws. Health laws. Ways in which children may help in enforcing these laws.

C. INTERMEDIATE AND GRAMMAR GRADES

It is taken for granted that in each intermediate and grammar-school grade *moral training* will be given daily in industry, obedience, cheerfulness, truthfulness, self-reliance, courtesy, motor control, cleanliness, helpfulness, and comradeship.

I have adopted the general plan and method of treatment of the different topics followed in "Character Lessons." In this report a suggestive outline is given for only one topic in each grade, showing the method of treatment. Teachers desiring fuller treatment of these topics will find the same in "Character Lessons" which will be sent *free* to any teacher on request. Address Character Development League, 31 West Twenty-second Street, New York.

FIFTH GRADE

1. *Industry.*
2. *Honesty.*
3. *Patience.*
4. *Usefulness.*
5. *Unselfishness.*
6. *Truthfulness.*
7. *Obedience.*

8. *Civic patriotism.*—Some things one owes to his country.—Obedience to its laws; the service of citizenship; defense in time of danger.

NOTE.—Civic clubs should be formed for caring for school premises. Pupils should be encouraged to take interest in the care and beauty of their own homes. Improvement associations have been formed in some cities which give premiums to children for the best kept lawn, most beautiful flower bed, etc. The aim should be to enlist the co-operation of the children in making "The school beautiful," "The home beautiful," "The city beautiful," and "The country beautiful."

Suggestive Outline

Industry:

1. *Explanatory.*
2. *Quotations:*

"Genius is the capacity for hard work."—Matthew Arnold.

"Some people are always grumbling because roses have thorns; I am thankful that thorns have roses."—A. Karr.

"The heights by great men reached and kept
Were not attained by sudden flight,
But they, while their companions slept,
Were toiling upward in the night."
—Longfellow.

"If a man would eat, he must work. A life of elegant leisure is the life of an unworthy citizen. Pleasure comes through toil and not by self-indulgence and indolence. When one gets to love his work, his life is a happy one."—Andrew Carnegie.

3. *Biographical examples:*

John Wanamaker (merchant); Thomas A. Edison (inventor); Horace Mann (educator); Luther Burbank (naturalist); Alexander Graham Bell (inventor); Henry C. Frick (manufacturer).

4. *Examples* of industry found in the community.
5. *Literature:*
"The Village Blacksmith."—Longfellow.
"The Forging of the Anchor."—S. Ferguson.
"To Labor Is to Pray."—F. S. Osgood.
"The Mowers."—M. B. Benton.
"The Miller of the Dee."—Charles McKay.
6. *Discussion:*
a) Health, happiness, and work.
b) Responsibility of ownership.
c) Getting something for nothing—evils of gambling.
d) At the George Junior Republic no one gets anything to eat unless he works. Is this right?
7. *Application:*
a) School studies—work well done every day.
b) Home duties.
c) Formation of *habits* of industry.

SIXTH GRADE

1. *Courage.*
2. *Fortitude.*
3. *Self-respect.*
4. *Perseverance.*
5. *Self-control.*
6. *Economy.*
7. *Amiability.*
8. *Contentment.*
9. *Civic rights and duties.*

Liberty of the individual—to labor; to form associations; of conscience; guaranty of security of life and property.

Duty to pay taxes; to cast a disinterested, intelligent vote; duty to serve the state as honest officials; duty to obey the laws and assist in their enforcement.

NOTE.—Relative to civic clubs, see Fourth Grade.

Suggestive Outline

Courage:
1. *Explanation.*
2. *Quotations:*
"Courage in danger is half the battle."—Plautus.
"Falsehood is cowardice—truth is courage."—Lowell.
"They can conquer who believe they can."—Emerson.

"Cowards die many time before their death;
The Valiant never taste of death but once."
—Shakespeare.

3. *Biographical examples:* Ethan Allen, Paul Jones, Elisha Kent Kane, Henry M. Stanley, Richmond P. Hobson, Theodore Roosevelt, David S. Farragut, Philip Sheridan.
4. *Notable examples in the community.*
5. *Literature:*
"John Maynard."—John B. Gough.
"Tom Brown Saying His Prayers" from *School Days at Rugby.*—Hughes.
"Ham Peggotty," from the shipwreck in *David Copperfield.*—Dickens.
"Virginia Dare."—*Heroic Deeds.*
"Kane."—Fitz James O'Brien.
"David and Goliath."—Bible.
6. *Application:*
a) Courage to tell the truth.
b) Courage to do right—moral courage.

c) Courage to withstand the bully or to protect the weak and innocent.
d) Courage to protect oneself or property.

SEVENTH GRADE

1. *Comradeship.*
2. *Self-reliance.*
3. *Fidelity.*
4. *Hopefulness.*
5. *Temperance.*
6. *Justice.*
7. *Patriotism.*
8. *Habits.*

9. *Character study in connection with history.*—The way in which this is to be conducted will be explained in a later section.

10. *Vocational training.*—The school should not only aid in the formation of ideals but it should give such training as will aid the children in making an honest living.

NOTE.—In reference to civic leagues. See Fifth Grade.

Suggestive Outline

Comradeship:

1. *Explanation and Interpretation.*

2. *Quotations:*

"The ornaments of a house are the friends who frequent it."—Anon.

"Owe no man anything but to love one another; he that loveth another hath fulfilled the law."—St. Paul.

"Every one can have a friend who knows how to be a friend."—Thoreau.

"Happiness unshared can scarcely be called happiness; it has no taste."—Charlotte Brontë.

"Teach me, O Saadi, how to make
My life as beautiful as thine;—
Like thee, to live for others' sake
And share with all, my oil and wine!
Teach me, in lavish alms, like thee,
My heart to spend!
Nay! Nay! No virtue is in me,—
I had a friend."

—James T. White.

3. *Biographical examples:* Oliver W. Holmes, Josiah G. Holland, Washington Irving, Abraham Lincoln, Samuel L. Clemens, Henry T. Tuckerman, Thomas G. Appleton.

4. *Notable examples in the community.*

5. *Literature:*

"David and Jonathan."—Bible.
"My Royal Guest."—Julia Ward Howe.
"My Playmate."—J. G. Whittier.
"Friendship."—Emerson.

6. *Discussion and application:*

a) Choice of friends.
b) Duty toward our friends.
c) Influence of our comrades upon our character.
d) Co-operation between individuals.
e) Co-operation and friendship among nations relative to war, commerce, learning.

EIGHTH GRADE

1. *Determination.*
2. *Ambition.*
3. *Courtesy.*
4. *Purity.*
5. *Imagination.*
6. *Consecration to duty.*
7. *Heroism.*
8. *Character.*
9. *Character study in history.*
10. *Vocational training.*

NOTE.—Relative to civic leagues among pupils, see Fifth Grade.

Suggestive Outline

Determination:

1. *Explanation and Interpretation.*

2. *Quotations:*

"Impossible! Let me never hear that foolish word again."—Mirabeau.

"First say to yourself what you will be; and then do what you have to do."—Epictetus.

"Decision of character is the one bright, golden apple which every young man should strive in the beginning to pluck from the tree of life."—John Foster.

"Many men owe the grandeur of their lives to their tremendous difficulties."—Spurgeon.

"So near Almighty is our dust,
Such fire is in us still,
We have when duty bids, 'Thou must'
The power to say, 'I will.'"
—James T. White.

3. *Biographical examples:* Andrew Jackson, Oliver P. Morton, Nathaniel Greene, Patrick Henry, Edwin M. Stanton, John Sherman, U. S. Grant, John A. Logan, Theodore Roosevelt, Samuel Houston.

4. *Examples in the community.*

5. *Literature:*

"Sheridan's Ride."

6. *Practical:*

a) A training of the will.

b) Find out what is right, then go ahead.

c) Danger of mental and moral sloth.

d) Dedication of oneself to play a manly part in the service of the community.

D. HIGH-SCHOOL GRADES

No other period of the child's school life is so important as the high-school period. This is the time of new ideas, new impulses, new interests, and new desires. These come in rapid succession and with almost resistless force. "This is the time," says Percival Chubb, "when literature, music, art, nature, solitude, religion, humanitarian enterprise, adventure, make appeal to the sensitive nature." The question is what appeal shall be heard and heeded? What appeals excluded? This is the time of life when passion is born which must be restrained and guided aright or it consumes soul and body. It is the time when social instincts and social interests are dominant and when social ideals are formed.

Hitherto, the course in moral instruction has dealt chiefly with the moral life of the child as an individual; now the chief concern is the development of the moral life of the individual as a member of society. Three means will be used in presenting the moral life in its social relation:

1. The life and activities of the school including the influence of the teacher.

2. Character study in history and literature.

3. An outline for the discussion of the moral relations of the individual to some of the chief social institutions.

FIRST YEAR HIGH SCHOOL

The Individual as a Member of Society

1. The different relations of individuals to each other.
   a) Illustration by referring to family, school, business, church, etc. (These are social relations.)
2. Some social relations of a merchant.
   a) Persons with whom he has dealings.
      (1) The manufacturers who make goods.
      (2) The railroad men who transport them.
      (3) The drayman who delivers them.
      (4) The clerk who sells them.
      (5) The customers who buy them.
      (6) Show how he may have relations with the farmer, teacher, doctor, lawyer, banker, barber, plumber, carpenter, insurance agent, minister, etc.
   b) Institutions and corporations with which he has dealings or is dependent upon in some way—government for mail, money, telegraph company, telephone company, gas company, fire department, police, etc. (Note the complex social relations.)
   c) What ones can he choose for himself? What ones must he have dealings with or be dependent upon whether he wishes to do so or not?
   (Think how he would be affected if any one of these failed him, e.g., the bank.)
   d) How should he treat the different persons with whom he has dealings, as for example his *clerks*, in relation to:
      (1) Wages—time of payment, amount, manner of payment.
      (2) Labor—hours, place where he works, holidays, etc.
      (3) Personal relation—while on duty; while off duty.
      (Should he be interested in the clerk's family? The kind of house in which he lives? His personal habits? The company he keeps? Why?)
   e) How should the different persons with whom the merchant has dealings treat him? e.g., his clerks in relation to:
      (1) The way in which they do their work.
      (2) Way in which they treat customers.
      (3) Way in which they keep their stock.
      (4) Personal honesty.
      (5) Personal relations while off duty as well as while on duty.
   f) In a similar way take up the relations between the merchant and some others with whom he has dealings.
3. Show how certain habits of conduct of individuals would be helpful or harmful and *who* would be benefited or harmed.
   a) For example take *courtesy* on part of clerk. It is beneficial.
      (1) To merchant because it brings trade.
      (2) To the clerk himself—better wages, more steady employment.
      (3) To customers—adds to their enjoyment while doing business.
      (4) Is anybody harmed?
   b) In similar way take honesty, industry, truthfulness, and their opposites.
   (Should a clerk misrepresent his goods in order to make a sale?)
4. Deduce certain principles to guide in conduct, as
   a) Honesty is or is not best policy.
   b) Courtesy is a valuable asset.
   c) Industry brings a reward, etc.
5. In society the relations of individuals may be grouped under three heads:
   a) Relation of superiors to inferiors.
   b) Relation of inferiors to superiors.

c) Relation of equals to equals.
(Show examples of all three of these relations in reference to the merchant and those with whom he has dealings.)

6. *The school* as an example of the different relations of individuals.
   a) What should be the relations of teachers to pupils in reference to:
      (1) Discipline.
      (2) Regular school work.
      (3) Athletics and school activities not part of regular school work.
      (4) Social intercourse in school and elsewhere.
   b) What should be the relations of pupils to teachers in reference to each of the above?
   c) What should be the relations of pupils to each other relative to each of the above?
   d) In the relations between teachers and pupils wherein would the following qualities be helpful or harmful and who would be helped or harmed?—Sympathy, studiousness, reliability, self-control, self-reliance, sarcasm, negligence, helpfulness, confidence, etc.
   e) What qualities and habits of pupils would be helpful to each other? Name some that would be harmful.
   f) Formulate some principles that would serve as a guide in making rules for the school.
7. Problems.
   a) Suppose the public opinion of a high school was poor as shown by the fact that the pupils were disorderly, gossipy, not studious, inclined to take advantage of every occasion for mischief. Who is to blame, the superintendent, principal, teachers, pupils, patrons? State some things the principal and teachers may do to help improve conditions. Some ways in which pupils may help.
   b) Which is more important to the pupils of a high school, to win a football game by foul means or to play a fair game and lose? Who or what would be benefited or injured in either case?
   c) In case of some flagrant violation of some rule or regulation by a pupil, should his fellows shield him? In what ways may this be harmful or helpful to the school? To the teachers? To the pupils?
   d) Whose business is it to protect the good name of the school? Name some ways in which this can be done?

SECOND YEAR HIGH SCHOOL

The Family, the Foundation of Society

1. Purpose and necessity of the family.
2. Duties of parents to children.
   a) Exposure of children (an old-time barbaric custom).
   b) Laws relative to abandonment of family.
   c) Laws relative to education of children.
   d) Ideals of family discipline.
3. Duties of children to parents.
4. Duties of children to each other.
5. Home economics.
   a) Husband as a provider.
   b) Wife as caretaker of the home.
   c) Duty to avoid debt and to accumulate property.
   d) Kind of education each needs to fit for the home.
6. Home as the center of social and moral influence.
   a) Part of the family in social life.
   b) Home comfort and home joys.
7. Good homes the foundation of society and the chief support of the state.

8. Formulate some general principles that should act as a guide relative to family life.
9. Problems:
   a) Two men were recently brought into court in New York for non-support of their mother who was old, feeble, and poor. What should have been done with them?
   b) Leckey, an English historian, says that one of the chief causes of drunkenness is bad cooking. If that is so what kind of education do you think girls need most?

THIRD YEAR HIGH SCHOOL

The Individual in Relation to a Vocation

1. Necessity for choosing a vocation.
2. Range of desirable vocations.
   a) What constitutes a desirable vocation?
   b) What principles should guide us in choosing a vocation? (Remuneration, fitness, health, competition, etc.)
   c) What vocations are open to free choice of anyone? What ones are not? (Can anybody who wishes to do so become a plumber, a teacher, a manufacturer?)
   d) Who should determine whether or not a person should enter a certain vocation? What moral principles are involved?
   e) When should a person choose his vocation?
3. A vocation as a means of intellectual and moral development or the reverse.
   a) Some occupations highly conducive to intellectual development—professions, certain kinds of business.
   b) Some occupations not conducive to intellectual development.
   c) Occupations conducive to moral development (teaching, ministry, etc.).
   d) Occupations which hinder moral development.
4. The right personal and official relations.
   a) Between employer and employee.
   b) Among employees.
   c) For suggestions see course for First Year High School.
5. What habits should a person have in order to succeed well in a vocation? What kind of efficiency?
   (In discussing this take certain occupations and consider what particular habits one should have in order to succeed well. Likewise relative to efficiency.)
6. Part played in successful career by each of the following: Industry, honesty, friendship.
7. Chief reasons why men are not employed.
   a) Financial reasons.
   b) Industrial reasons.
   c) Personal reasons—make list of personal reasons such as inefficiency, dishonesty, drunkenness, disagreeableness, irregularity, unreliability. Note the ones that have moral significance.
8. Why are some classes of men seldom or never out of employment?
   a) Have business or profession of their own.
   b) Are efficient, trustworthy, and loyal to their work.
9. Under what conditions should persons work?
   a) Relative to hours of employment.
   b) Relative to hygienic conditions.
   (Mine and factory inspection laws. Are they necessary?)
   c) Relative to high explosives, dangerous machinery, and hazardous undertakings.
   (Safety appliances; responsibility in case of accidents.)
10. Remuneration received from one's vocation—what should it be?
   a) In the professions—teaching, law, medicine, the ministry, etc.
      (1) Amount invested in way of time and money.

(2) Period of life of productivity.
(3) Hazards, personal and financial.
(4) Remunerations in the way of health, social standing, political prestige, opportunities to be at home, etc.
(5) Chance for promotion.
(Each of these points needs to be considered before determining what is *just* in the way of remuneration.)

b) In a similar way consider the farmer and business man, skilled and unskilled laborer.

11. Problems.

a) For what reasons if any should an employee be discharged? Is he entitled to know the reasons?

b) Does an employer have any moral right to "black list" a man after he has been discharged? Give reasons.

c) The promoters of a railroad invest $1,000,000 actual cash and issue $5,000,000 stock which they sell for $3,000,000. Are they entitled to the $2,000,000? Should there be laws relative to such transactions? What kind?

d) Two men, A and B, engaged in same business in the same city. By secret arrangement A was enabled to get better freight rates than B. What effect would it have on the business of each? What laws on this subject? Is any moral principle involved?

e) Suppose A not only gets a better freight rate but suppose that the railroad companies pay him part of freight paid by B. What effect will that have on the business of each? Have the morals of the situation changed?

f) A foreman in a factory was authorized to buy machinery for his department. He received from a firm having machinery to sell $1,000 to recommend the purchase of their engines and machines. What is the moral principle involved? Supposing the machinery was in his judgment the best offered, then what?

NOTE.—I am aware of the difficulties raised in considering this subject, and the great difference of opinion and still greater difference in practice. It is expected that the questions will be discussed in an impartial manner. The fact that pupils must face these and similar problems as soon as they leave school is why they are presented.

FOURTH YEAR HIGH SCHOOL

The Individual in Relation to the State

(By the state is meant any form of government, municipal, state, or national)

1. *Some rights of the individual guaranteed by the state.*

a) To live.
b) To own property.
c) To work and enjoy the rewards of one's own labor.
d) Freedom of contract.
e) To travel from place to place.
f) To marry. (What limitations?)
g) Freedom of speech. (Can a person say what he chooses without being held responsible?)
h) Freedom from arrest without due process of law.
i) Right of speedy trial before an impartial jury.

2. *Special rights of children.*

a) Not only right to live but to be cared for, protected, and supported.
(1) Abandonment of children—who is responsible? How cared for by the state? (Orphanages, etc.)

b) Right to be educated.
(1) Truancy laws.
(2) Child labor laws.
c) Right to inherit property.
(1) Guardians—laws relative to same.

Problems:

Should a child have the right to play? If so, where, when, and under what conditions?
Should a child be allowed to work? If so, at what age? Under what conditions?

3. *Protection of the individual against assault.*
a) Some different kinds of assaults.
b) Character and habits of persons most likely to commit assault. (Ill-tempered, lacking in self-control, passionate, quarrelsome, drunken, profane, etc.)
c) Character and habits and conditions of persons most likely to be assaulted.
d) Carrying concealed weapons—why unlawful?
e) Some criminal laws relative to assault.

4. *Accidents and individual responsibility.*
a) Different kinds of accidents—unavoidable, committed thru ignorance, on account of negligence or carelessness.
(1) Who is responsible in each instance?
b) Accidents resulting from use of high explosives, dangerous machinery, defects in track, or lack of safety appliances in railroading. (Who is responsible?)
c) Accidents resulting from certain pleasures, sports, and recreations.
d) Habits and character of persons most likely to be the cause of accidents.
e) Character, condition, and habits of persons most likely to be the victims of accidents.
f) Some laws for prevention of accidents.
(1) Safety appliances in railroading, navigation, manufacturing, mining, etc. Give some examples. What is the moral principle back of such laws?
(2) Laws relative to automobiling, fast driving, etc. Are these founded on sound moral principles?

5. *The state as a protector of property.*
a) Different kinds of assaults on property. (Fraud, theft, arson, burglary, etc.) Note that each is a crime.
b) What relation does each of the following bear toward the above crimes: ignorance, poverty, extravagance, gambling, laziness, cupidity, speculation, drunkenness, bad associates, love of fine clothes?
c) Laws and punishments for each of the above crimes.
d) How are these laws enforced and punishments inflicted?

6. *The state as a protector of character.*
a) Forms of assault against character—lying, slander, libel, insinuation, innuendo, etc.
b) Wherein is the moral baseness of each?
c) What relation does each of the following traits of character bear to any of the above: envy, jealousy, hatred, thoughtlessness, anger, friendship, considerateness, truthfulness, ignorance, love?
d) What laws, if any, against the defamation of character?
e) What moral principles should guide one relative to the character of others?

7. *The state as a protector of health.*
a) Contagious diseases.
(1) Individual responsibility. What moral principle is involved?
(2) Laws relative to contagious diseases.
(3) Duty of co-operation with health authorities.

b) The fight against tuberculosis.
  (1) Necessity and duty of public co-operation.
  (2) Laws to prevent the spread of tuberculosis.
c) Pure food and health.
  (1) Food and drug adulteration—the danger to health and life.
  (2) The moral principles involved—deception, fraud, secret assault on health, perhaps life.
  (3) Pure food laws and the necessity for their enforcement.
d) Pure water necessary for health.
  (1) Water supply for cities. For the country.
  (2) Pollution of water supply and the spread of disease—typhoid.
  (3) Laws relative to the pollution of streams and other water supplies. (Should the department of public health inspect water supply in the country as well as in the cities?)
e) Plenty of fresh air necessary to health.
  (1) Moral responsibility for proper ventilation of schoolrooms, shops, storerooms, factories, mines, and private residences.
  (2) Tenement house laws and necessity for their enforcement.
f) Necessity for sanitary laws and their proper enforcement.
  (1) Moral responsibility resting upon officials for the enforcement of sanitary laws.
  (2) Moral responsibility of the individual to obey the law.
g) Pure milk and infant mortality.
  (1) Fight that is being made for pure milk in cities.
  (2) Sanitary regulations necessary to insure pure milk.
  (3) Moral responsibility of public officials and the people of the community as well as dairymen and dealers for providing pure milk.

8. *The patriotism of peace.*
a) Duty of public officials.
b) Duty of voters.
c) Duties of citizens in general.

9. *Problems.*
a) A child dies on account of being fed impure (adulterated) milk. Is this murder? If so, who is responsible—the parents who gave the milk to the child, the dealer who sold it, the dairyman, the milk inspector, or the people of the community?
b) A family moves into a poorly lighted, ill-ventilated, dirty tenement house in which some previous occupants had died of tuberculosis. Some of the members of the family take the disease and die. Who is responsible?
c) A boy smokes cigarettes until his health is broken—perhaps he dies. Who is responsible, the boy himself, the parents, the dealers who sold him the cigars, or society, or *nobody?*
d) An automobile running at a high rate of speed along a crowded street kills a child. Who is morally responsible, the chauffeur, the owner, the child, the parents, the police, the people of the community, or *nobody?* How would you go about it to prevent such accidents?
e) A farmer's family drinks surface water from the old well and some of them die of typhoid fever. Who is responsible, the farmer, the person that drank the water, the family doctor, the teacher, the health officer, or *nobody?* How would you go about it to prevent other persons contracting the disease?
f) A mine explosion occurs and hundreds of miners are killed. How would you go about it to fix responsibility?
g) A man drinks liquor till his health, money, job, self-respect, and honor are all gone. Who is responsible—the man himself, the saloon-keeper, society, or *nobody?*

II. MEANS OF MORAL TRAINING AFFORDED BY THE PUBLIC SCHOOLS

So far in this report the chief emphasis has been placed on moral instruction with only incidental reference to moral training. We now come to the consideration of the school as a social organization for the training of children in the formation of right habits of conduct which constitute the very foundation of the moral life. Thru its varied activities the school furnishes so many opportunities for moral training that we can enumerate but a few of them, commenting only on the most important. Those chosen for consideration are as follows:

1. The influence of environment.
2. The social life of the school.
3. School discipline and routine work of the school.
4. Content and use of the course of study.
5. The personality of the teacher.

In treating this subject, we do not attempt to present anything new. The chief aim is to present only that which has been thoroly tested and which experience has demonstrated to be of vital importance. The very fact that most of it seems so commonplace is one reason why it should be emphasized, lest in our effort to meet the greatest educational demand of the age—the development of a higher type of character—we should neglect or minimize the most effective means at our command to do so.

1. THE INFLUENCE OF ENVIRONMENT

A suitable physical environment is of great importance in the moral training of children. The building and surroundings should be clean, attractive, and wholesome. If the building is old and dilapidated; if patches of plaster have fallen from the ceiling and the walls are dark and dingy; if the seats are marked and carved and the floors and windows dirty; if there are no window shades, no walks, no flowers, no shrubs, no trees; if the outhouses are an abomination of foulness and vulgarity—if such physical conditions exist, be assured that the moral effect is bad, and that in so far as the physical environment can affect the lives of the children, we have *immoral* and not moral training. In a case like this something more practical is needed than memory gems, beautiful stories, and even the study of noble characters. There should be a general house-cleaning with soap and water, paint and plaster. This is necessary not only from the standpoint of health and comfort, but from the standpoint of morals as well.

The late Dr. Canfield relates an interesting story relative to the first spontaneous movement toward art decoration at Aurora, Illinois. "The darkest, meanest room," says he, "in the darkest, meanest schoolhouse was chosen. The floors were cleaned, the walls tinted, and the place made generally brighter. When the children came back on the first day after the reopening, they stopped at the door, hesitated about going in, and for the

first week walked on tip toe and whispered when they spoke to each other. The classroom had suddenly become sacred to them." The movement for schoolroom decoration and the beautifying of school grounds has already done much for moral as well as æsthetic culture.

Beautify the school grounds; bring plants and flowers into the schoolrooms; adorn the walls with beautiful pictures and copies of the sculptor's art; let these things be arranged in accordance with the canons of good taste, and thru the power of suggestion, we have silent teachers of neatness, orderliness, cleanliness, self-respect, purity of thought, and nobility of action.

The Moral Influence of Social Environment

But more potent still for good, or evil, is the influence of social environment and the moral "atmosphere" of the school. Children are creatures of imitation and acquire their habits chiefly from what they see others do. Hence the necessity for honest school administration and the practice of true courtesy and right living on the part of school officials and all persons in any way connected with the schools.

Think of what it means to the children, if the members of the board of education do not stand well in the community, or are quarreling among themselves; or there are charges of favoritism, chicanery, grafting, or mismanagement of any kind. Or suppose teachers, principals, and school officers treat each other with disrespect and contempt—all these things are observed by pupils and cannot fail to have a bad influence on them. As they grow older, the tendency is for them to become cynical, skeptical of good, and inclined toward evil.

On the other hand, if the whole administration is clean and wholesome, if members of the board of education stand well in the community, if the attitude of teachers, principals, and school officials is that of mutual confidence and esteem, if the rectitude of the lives of those concerned with the management of the schools is unquestioned, if there is also a wholesome school sentiment in the community, then there is a social moral environment in which goodness is contagious and in which every child receives a moral uplift.

Proper School Spirit

Of equal, and sometimes of even greater importance in the development of character is the spirit among the pupils themselves. While they are influenced by the examples of adults, yet they are also greatly influenced by the examples, ideals, and habits of one another and the traditions of the school. Some years ago in a high school in the Middle West there was an organization known as the "Never Studies." If a member was caught studying he was reprimanded; if he made a good recitation in class he was fined; if he failed to get into mischief for a week he was expelled. If the spirit of the members of that organization had become general, the usefulness of that high school would have been at an end. Habits of industry,

obedience, truthfulness, manliness, self-respect, and even common honesty do not thrive where such a spirit prevails.

On the other hand, if pupils refer to the school as "our school," if they are jealous of its good name and seek to promote its best interests; if they are studious, loyal, and well behaved—trying to do something themselves and striving to help others—wherever such a spirit exists, the school becomes a veritable nursery for the production of moral character.

2. THE SOCIAL LIFE OF THE SCHOOL

As a means of moral training, the social life of the school is usually underrated. Here children of all classes meet and commingle. They talk with each other, play together, share each other's joys and sorrows. They form clubs, cliques, and gangs for all sorts of purposes, good and bad—athletics, debating, predatory excursions, offensive and defensive warfare. This is democratic society in the making.

But who can estimate the value of such social intercourse? It is in this way that friendships are formed and tested. It is a training school in courage, honor, fair play, manliness, and leadership. Here every boy and girl is tried out and learns the meaning and requirements of social fellowship. The things most needed relative to the social life of the school are proper guidance and ample opportunities for development in the way of free play, athletics, and school organizations of various kinds.

Free play is necessary not only for health and physical development but also for moral and social growth. It aids in the development of self-control, self-reliance, cheerfulness, agreeableness, and good fellowship. It develops leadership and gives opportunity for training in initiative. Play is the natural outlet for the superabundance of energy and animal spirits. "Play in a boy," says Jacob Riis, "is like steam and superheated steam at that. You can sit on the safety valve of the steam boiler but it is risky business. You must give the boy a chance to blow off his steam."

All games which require team work have especial social value. The individual learns to co-operate with his fellows—to subordinate self to the interest of the group. He learns the value of rules and the necessity of obedience to them. Every athletic contest is a contest in courage, fair play, self-control, manliness, loyalty, and good fellowship as well as skill, endurance, and ability to play the game. So important are group games from a social and moral standpoint, that means should be devised whereby *all* pupils would have an opportunity to take part.

If properly directed the various school organizations, such as literary societies, musical and journalistic clubs, and art associations, furnish additional means for social and moral training. These interest the children in things worth while, afford opportunities for training in initiative, co-operation, self-reliance, tact, patience, persistency, and discretion. They also develop the sense of responsibility and the necessity for self-restraint.

These qualities are of prime importance in the affairs of active life, and training in them fits one for the larger responsibilities of citizen, church member, employer, and parent.

But all these social activities must be properly directed and supervised or they become sources of mischief rather than agencies for good. They must be wisely directed so as not to interfere with other school work, nor call for too great an expense of time or money. The director should suggest and teach suitable games, coach in athletics, debating, journalistic, and literary work. Proper standards of conduct and business methods should be inaugurated and maintained. Each pupil should be helped to find a part suited to his talents and agreeable to his tastes, and then encouraged to do his best. There should be freedom of action under necessary rules; each pupil should do those things which will be most helpful to others as well as beneficial to himself. The director of the social activities of a school, whether teacher, minister, or some other public-spirited citizen, has almost unlimited opportunities for doing good.

If the social activities of the school are properly directed, there will not be much supervising to do. Yet there must be someone in authority who will see to it that the playground and the athletic field are clean and wholesome places; that profanity, vulgarity, gambling, quarreling, fighting, and all other forms of hoodlumism are prohibited. Supervision is also needed in order to insure the proper organization and conduct of school clubs, and that reasonable rules relative to hours and conduct are enforced at all times.

3. THE DISCIPLINE AND ROUTINE WORK OF THE SCHOOL

The discipline and routine work of the school furnish many excellent opportunities for moral training. In the best public schools, this means is more fully utilized than any other. If the school is well organized and well disciplined, if lessons are carefully assigned and carefully prepared, if recitations are properly conducted, if the right spirit is shown by teacher and pupils toward their work and toward one another, then the school becomes a veritable nursery for training in many of the elemental virtues—promptness, regularity, obedience, industry, cheerfulness, self-control, self-direction, perseverance, self-reliance, initiative, politeness, helpfulness, honor, honesty, diligence, justice, and responsibility. These things are not taught in any perfunctory way, but children are trained daily in the practice of them: promptness in obeying signals, directions, and commands; regularity in school attendance and preparation of lessons; obedience to the requirements of the teacher and the rules and regulations of the school; industry, perseverance, and diligence in the preparation of lessons and doing other school work; politeness to the teacher and to each other; helpfulness in keeping order, passing and collecting materials, and in many other ways; neatness and orderliness in the preparation of written work and care of desks; cleanliness of person, clothing, and speech; responsibility for the preparation of work assigned,

for the care of books and supplies, and for conduct. "Self-respect is engendered when a child does his best at tasks that are worth while and within his power to do well."[1] A child is drilled in telling the truth when he makes careful observations and accurate statements, but the reverse when careless answers and distorted truths are accepted in the recitation. Honor and honesty are taught when pupils are trusted—trusted relative to matters of conduct, the performance of a task, or the discharge of a duty. Trust a child and let him know that you trust him and he will soon trust himself.

The discipline of the school should be similar to that of a well-regulated home. The teacher should understand his pupils; know what is worth while and what is of little importance; understand the force of suggestion, the influence of a gentle voice, and the power of sympathy. He should also understand that humor and common-sense have a place in school discipline and that cheerfulness is contagious. The discipline should be reasonable and carried out with regularity, kindness, and firmness. Pupils should learn the meaning of justice by seeing it applied—not stern justice but justice tempered with mercy.

Each specific case of discipline furnishes a special opportunity for impressing a moral lesson, if we are only wise enough and skillful enough to use it aright. When a child is brought face to face with his act, when he sees that wrongdoing results in shame and suffering, that is the opportune moment to teach the lesson of self-control, self-restraint, and responsibility for his own conduct. That is the time of times to extend the helping hand, to assure him, that, altho he has made a mistake, yet you still trust him, that he is capable of doing better, and that you will help him to be stronger and to do better in the future.

Children should have a part in the government of the school and this part should increase as they grow in years and discretion. Even in the primary grades they should be taught responsibility for their own conduct, taught not to hinder but how to help their neighbors. As they grow older and wiser and more discreet; as they learn self-control, self-direction, and self-restraint; as the spirit of co-operation and helpfulness increases, pupils should have greater freedom, greater opportunities to take a part in directing the activities and in molding the sentiment of the school. Just as wise parents confer with their older children relative to the management of the affairs of the home, and *rely* upon them not only to conduct *themselves* properly, but also to help in the care and training of the younger members of the family, just so teachers should do relative to the management and discipline of the school. Parents do not abdicate, neither do they pretend to transfer their authority to the children while in reality they still retain it. What they do do, is to counsel with the older children, to enlist their co-operation and support. This is far more beneficial to all parties concerned than if parents had made a real or pretended transfer of authority.

[1] Course of study for city of New York.

Self-government can never be conferred; it can only be achieved. This is true in the school as well as in the home and in society in general.

4. THE COURSE OF STUDY

Ignorance, according to Dr. Edward T. Devine, is still the greatest cause of human misery. This conclusion he reaches after spending ten years as secretary of the Charity Organization Society of the city of New York and after he had employed all the best methods of investigation known to modern science. Ignorance of one kind or another leads all other causes in producing accidents, sickness, loss of employment, poverty, drunkenness, vice, and crime. "We can save babies from milk poisoning," says Dr. Devine, "we can save children from the permanent disabilities resulting from the neglect of their childish ailments; we can save young girls from the dangers and the injuries attendant upon their employment in factories, and department stores and elsewhere; we can save boys from loss of their manhood and fit them better by vocational training for normal life; we can save the women from overwork; we can save the men from industrial accidents, from death by tuberculosis and typhoid; and we can save them, I believe, at last, from the terrible curse of alcoholism, which is half a disease and half a crime, and altogether the greatest foe of health and vigor that we have." Of course his "plan of salvation" includes many things; but *knowledge of the proper sort* is the foundation of it all. "Ye shall know the truth and the truth shall make you free."

The content of the course of study furnishes the chief means of moral instruction in the public schools, and its *proper use* one of the important means of moral training. The body of knowledge, therefore, constituting the course of study is a matter of the highest importance from the standpoint of character development. The old dogma, "It matters little *what* you teach a child provided it is well taught," is giving way to a saner doctrine, "What you teach is of prime importance; how it is taught is secondary."

The content of the course of study is largely traditional and chiefly for cultural purposes. But much more than "culture" is needed if the child when grown up is to meet the economic, social, and moral demands of the times. During the last quarter of a century, the course of study has undergone great changes, chiefly by way of accretions. It seems destined to undergo still greater changes in ways that are structural and fundamental.

Physical Education

There is need of better physical education in that broad sense which is calculated to produce strong, healthy, vigorous, active bodies with great power of endurance. Only persons with such bodies can stand the strain of modern life. Besides, ill-health is the most constant attendant of poverty with its train of vice, crime, and misery. There should be not only physical

training by means of gymnastics, organized and free play, but there should be definite and ample instruction relative to food, clothing, exercise, rest, heating and ventilation, sanitation, water supply, food adulteration, sewerage systems, contagious and infectious diseases, and the evil effects of the use of alcohol and other narcotics. The "conspiracy of silence" should no longer be maintained which prevents children from being taught what they ought to know relative to sex. Such knowledge imparted at the right time, in the right manner, and by the right person would be of inestimable value to children morally as well as physically—would save souls as well as bodies.[1]

Vocational Training

"Bad cooking," says Lecky, "is responsible for much of the drunkenness of the world." He might have added that bad housekeeping in general is responsible for many divorces, business failures, and the wrecking of family life in general. The "bread line" in New York City, the never-ending procession of tramps, the great army of unemployed, are composed chiefly of men who are inefficient—"not on to their jobs" when they have any and soon out of jobs altogether. The connection between immorality and industrial inefficiency is too close to require elaboration. The breakdown of the apprentice system, the migration of vast numbers to the great cities, the rapid changes of industrial and economic conditions leave large numbers of persons inadequately prepared for meeting the common everyday requirements of life.

The movement relative to vocational training thru a change of curriculum in the public schools seems to be based on necessity—and destined to affect not only public-school education but the life of the people industrially, socially, morally. Girls of all classes should have the opportunity to learn domestic art, domestic economy, the nurture and care of children—in short, how to be home-keepers. Every boy should have an opportunity, at least, to begin the preparation for some kind of a vocation by which he can become a producer of something society needs and which will enable him to support a family. How the problem of vocational training is to be solved cannot be foreseen at this time, but that it must be solved in some way is apparent. Its proper solution will affect for the better the moral life of the people.

The other subjects of the curriculum which contribute most to moral education are science, civics, history, and literature. The teaching of truth is the special contribution of science to the schools. "The habit of accurate observation," says Dr. Nicholas Murray Butler, "and exact description, and the setting up of standards of action which have accuracy as a basis is a habit of accuracy which at bottom is a habit of truth."

[1] Every parent and teacher should be familiar with the *Eighth Yearbook* of the National Society for the Scientific Study of Education—"Education in Reference to Sex" (the University of Chicago Press); also *A Song of Life* by Margaret Warner Morley (A. C. McClurg & Co.).

Civics

While civics as taught at present is generally unsatisfactory, yet when it is rewritten and its contents enlarged so as to include part of social economy, it is likely to become *the* subject which will contribute most to the development of that form of civic patriotism which finds expression in obedience to law and the faithful discharge of public duty. We must rely on the right teaching of this subject to enable the people to understand the complexities of public administration so as to be able to fix responsibility and apply the proper remedy in case of wrongdoing. The chief enemies of the republic are not in foreign lands, neither are their weapons the bludgeon, the dagger, nor the machine gun. Our most dangerous enemies are in our very midst, and their most powerful weapons are secrecy, guile, intimidation, bribery, and treachery. We need to teach in the public schools a kind of civics which will enable the people to know who their public enemies are, and which will enable them to bring to light their crooked and nefarious methods. If this can only be done, the people will rise in righteous indignation and drive the miscreants from power, brand them with infamy, and clothe some of them in stripes.

History

The study of history and particularly biography is especially valuable in the development of moral character. Parable is always more effective than precept. So when we wish to bring home to the children a lesson in courage, fidelity, justice, or magnanimity we have only to point to the deed of some noble man or woman and say, "Lo, there it is." By this means concrete examples of every trait of character may be presented. In this way we may study not only the acts of men but the motives that prompted to action, view the real characters back of the masks, see the shortsightedness and folly of wickedness and the final triumph of truth and justice. In the study of history we see that the rich, the proud, and the mighty are either soon forgotten or only remembered to be execrated, while the fame of the noble and the good survives dungeons and crosses and even time. In this way nobility of character is presented not only as something worth while for the moment, but as the *only* thing of real value.

Literature

But the moral content of literature surpasses that of any other school subject. Its concreteness, its sensuousness, its simplicity, its great variety of forms and themes, its universality make it the most nearly perfect means for the portrayal of the human soul. So important is the reading and study of good literature that it should be begun in the primary grades and continued to the end of the last year of the high school—yes, thruout life. "The love of good literature," says McCunn, "will do tenfold more to oust

the tales of scandal, frivolity and crime than a thousand repressive '*thou shalt nots.*'"

In giving a brief synopsis of the scope of literature by grades and its moral content, we cannot do better than to quote with approval Dr. Percival Chubb who has made a lifelong study of the subject.[1]

"The aim of literary and linguistic training is the formation of character. Of what avail to have read Shakespeare, Milton, Emerson, and Lowell, if the intercourse has not provided a lifelong thirst for helpful and inspiring communion with them and other great spirits?"

Reading for the primary grades.—"It must be varied with gentle emphasis upon those interests which are found to be dominant in each period of growth. Always, however, these interests must be regarded as means or opportunities whereby we may quicken and nourish those faculties of admiration, hope and love, of courage and loyalty, which are the roots of worthy character and the sources of noble delight.

"As to ethical characteristics, we must have literature that celebrates the duties and privileges of early childhood; love and compassion for all gentle things—for the meanest flower that blows and for the weakest creature that breathes; the domestic virtues, filial love and obedience, brotherly and sisterly love, respect for elders and teachers, good-will and justice toward playmates and equals, veneration for the great and for the commonwealth."

Types of literature for grammar grades.—"Adventure and romance, heroism and daring, the wonders and excitement of travel and exploration, the march and siege—upon these we may feed the children; and upon these, as sure foundations of the superstructure to be raised in later years, we may build. Above all, we shall surround them with a cloud of witnesses to the glory of courage and nobility; we shall give them the companionship of the great and the friendship of the tried and true, to win them to their likeness.

"The lyric impulse too will persist and deepen; and it is thru lyric poetry that we shall work for the chastening idealization of those primitive passions of anger, hate, devotion, and love into their higher forms of courage, loyalty, obedience, and reverence."

Humor as a moral tonic.—"Let the tonic breeze of genuine mirth sweep across our solemnity at times. Besides, our boys and girls need education in humor; failing it, they feed upon cheap smartness or questionable jest, and their sense of fun narrows to horse play and the practical joking that disgraces our college life—disfigurement of public monuments and the like. So let us admit some of Mark Twain and Holmes and Saxe, Hood, Stockton, and Kipling."

[1] The quotations which in a few instances are paraphrases are from *The Teaching of English in the Elementary and Secondary Schools*, by Percival Chubb (the Macmillan Co.).

High-school literature—cultural and vocational.—Space will not admit of any lengthy discussion relative to literature for the high school. In general it should be:

1. Literature that will meet the characteristics, the needs, and the interests of the adolescent period.

2. Such as meets the social and vocational demands made upon high-school education.

"The two requirements must be kept in mind: general culture, or education for a typical ideal manhood and womanhood; and preparation to meet the actual demands of life and a specific kind of environment."

5. THE PERSONALITY OF THE TEACHER

The most important of all school agencies in the development of moral character in pupils is the teacher. We would not minimize the value of a good course in morals, of wholesome environment, of proper school spirit, of good discipline and a good course of study, yet it is the teacher who makes the vital connection between these things and the lives of the children. It is the teacher who sets the example in neatness, orderliness, politeness, cheerfulness, and kindness. It is the teacher who furnishes, or should furnish, a constant example of poise, self-control, self-reliance, and true dignity. It is the teacher who teaches the children industry and the right spirit toward their work by helping them plan their work and by doing his own work with fidelity and zeal. It is the teacher who makes justice a vital thing by exemplifying it daily in the school. It is the teacher who molds public sentiment in the school, who gives timely advice, who encourages, comforts, restrains, guides, and controls the children, and whose every look, tone, and gesture help make or mar human souls.

The influence of a true teacher as a moral force is exhibited in manifold ways. It is constantly felt in the schoolroom. It is potent on the playground and on the athletic field. It pervades every school club, every social gathering in which the children participate. It serves as a guide in the choice of books, playmates, and friends. It is shown in conduct on the street and in the home. It is the precious thing that lives in memory and abides in character after lessons have been forgotten.

Under the direction of Dr. G. Stanley Hall, about a thousand adult persons—men and women—were interviewed as to what qualities in their teachers they still most prized or most disliked. A summary of their answers follows. It sets forth clearly and in striking contrast the qualities of teachers most appreciated and despised, not by pupils while still in school but by men and women after reaching maturity.

"What seems to be most appreciated in teachers," says Dr. Hall, "is the giving of purpose, arousing of ideals, kindling of ambition to be something, to do something and so giving an object in life, encouragement to over-

come circumstances, and, in general, inspiring self-confidence and giving direction. Next come personal sympathy and interest, kindness, confidence, a little praise being understood; and next, special help in lessons, or timely and kindly advice, while stability and poise of character, purity, the absence of hypocrisy, independence, personal beauty, athleticism, and vigor are prominent."

In striking contrast to the above, "the qualities that inspire most dislike are malevolence, sarcasm, unjust punishment, suspicion, severity, sternness, absence of laughing and smiling, indifference, threats and broken vows, excessive scolding and 'roasting,' and fondness for inflicting blows." Only the true teacher exercises a strong, positive, beneficent, and lasting moral influence over his pupils.

The qualities and training that a teacher must possess in order to wield the greatest moral influence over pupils are so many and varied that they cannot be even enumerated here. He must have a knowledge of child life, know its needs and possibilities. He must know the subjects he would teach and be acquainted with social conditions which the pupils must enter. He must know his art—know what to do and how and when to do it. He must be willing to work and have the power of endurance that will enable him to work a long time effectively. He must have insight, and tact and humor, and common-sense and discretion, and enthusiasm and sympathy. He must have a personality that attracts and force of character that commands esteem and confidence. He must live a life which exemplifies the virtues he would teach.

The influence of such teachers is the most potent agency the school possesses for moral training. The procuring of enough such teachers to fill the schools is the greatest educational need of the times. Only by setting apart and dedicating the best of the nation to train the children of the nation will this educational need be met.

THE HOME AND SCHOOL LIFE

JAMES M. GREENWOOD, SUPERINTENDENT OF SCHOOLS, KANSAS CITY, MO.

Each exact science is based on certain elementary or primary principles. It is thru the mastery of a few definite fundamental truths that the learner comes to a clear and unquestioning recognition of the abstract principles which constitute the foundation of the mathematical, physical, biological, and other exact sciences, and these principles are applicable to all spheres of mental activity among civilized peoples. In the special sciences of physics, chemistry, biology, geology, and astronomy, by the observation of individual facts, general laws were discovered and universal conclusions established as the groundwork of these sciences, and what is true of these sciences is equally true of all other departments of exact human knowledge.

Observed at first as facts, grouped and classified according to principles in which uniformities and dissimilarities can be detected, sciences are created, and the laws governing them as such are formulated.

In the moral sphere, the child at first has no intuitions of the abstract principles of right and wrong, but as he grows in stature and knowledge, the time is reached that when he witnesses an act he feels it to be one of love, kindness, faithfulness, or of gratitude, or its opposite, and he further decides that it is a good or a bad act, and it is then that the moral idea is gaining a foothold in his mind. Thus by degrees he arrives at the conclusion that one act is good and another is bad. It is from this norm, branching out in two different directions, that the child makes his first crude generalizations on moral questions. By comparing an act with the standard that is being built up in his own mind, whether this particular act concerns himself or others, is the method of moral development. As a result of this kind of mental thinking, a philosophy of conduct is established that is as valid to him as are the axioms of mathematics or the verities of philosophy to the analyst or the logician. With such mental conceptions firmly fixed in the learner's mind concerning his thoughts, feelings, and actions, the basic principles of morality are as valid to him in his modes of thinking as any other group of notions he can possible have.

Behind every act there should be clear knowledge and a definite purpose, and the more complete the knowledge, the stronger is the tendency to act up to the fullest measure of light one has. A constant repetition of virtuous acts grows into habit, habit develops into character, character makes conduct, and conduct is the greatest part of active life in conformity to one's nature.

The real problem of moral training from its theoretical aspect is to investigate the laws or forces which control people in groups, and to teach them how to live together in complex societies so that each will be guided by righteousness and justice in his relations with others.

As a practical science moral education, or ethics, relates to all kinds of deeds and habits of doing which concern one in relation to others, whether in small or large groups. One may conduct himself in such a manner as to obstruct the wishes and actions of his fellows, or render their efforts void, according to his power and skill in setting his will over against theirs, or by dividing or nullifying their counsel; on the other hand, one may think and act in such a manner as to assist and reinforce their efforts and bring comfort and satisfaction to large masses of people. The implication is that there are rational methods of action that can be pursued by individuals for the benefit of others, and that peaceful combinations of men may be formed to overcome the forces of nature to the end that each individual may participate in the triumphs of all, and that in this process of contribution and participation lies the real source of power in practical ethics which of itself advances civilization by giving each a chance to share in the joint contri-

bution of the whole. The help that each contributes returns to the giver many times multiplied. This is a reservoir of power and it can be indefinitely increased only by adopting and adhering to ethical action as a habit of doing, thus leading to a continuous growth in ethical insight, by one's becoming intimately acquainted with himself. Human achievement consists in getting control of the forces of nature and of human nature, and by using them intelligently and skillfully. Under this view, ethics belongs to the will, because it relates directly to the manner and purposes of doing. There are certain habits of thinking and doing and out of these comes the saying that "good behavior is a bundle of habits." All habits that facilitate one's combining and acting in concert with others in matters of general interest belong to the mind in willing rather than to the mind in thinking.

Under such a conception, behavior at home and in school becomes a matter of the very highest importance in training children into right habits of doing, and in school it makes classwork possible, which is altogether a higher form of activity than mere individual study under a teacher or tutor, or capricious actions at home. In individual work the learner cannot see himself doing as he can see his classmates at work and observe their successes and failures which he can use as a standard to measure his own attainments. He discovers, also, by observing his own classmates, different ways of looking at the same subject in the lessons assigned, recited, and elucidated, and he thus acquires information from them which gives him a better insight into the work that he is to do. His mind works in two directions at the same time—one end of his mind is with his classmates, and the other end is in his interest in the subject as it is understood and directed by himself. He gains insight into the workings of other minds while mastering his own thoughts thru self-activity. Self-activity is doubly reinforced, because the learner sees others pursuing the same lines of work as himself, and yet achieving success by other methods of industry and persistence. It is in the school also that the pupil assumes a different attitude from the home circle where his caprice is not curbed and subordinated to the influences of others working under similar conditions. The school from its nature must conserve the interest of each individual thru the mediation of the whole school, and this mediation is effected thru certain ethical school habits usually designated as school virtues, which are most potent factors in character formation.

The stimulus arising from concert of action when all are at work and intent on doing the same thing within a stated time, gives confidence to each one in his not being engaged alone in his tasks, and the alertness that he observes in others begets alertness in himself, a quality that produces orderly and regular action in preparation and recitation work. To work silently tends to repress disorder, impulsive and explosive action by eliminating frivolity, and putting checks on nervous explosions so that one may

get control of his body and mind. It is thru self-restraint that the verbal impulse to chatter may be reduced to within moderate limits. The outcome of this species of self-repression consists in the cultivation of mental concentration, whether the learner is engaged in his own work or attending to that of his fellows or of his teacher. Unless this habit is cultivated successfully, there will always be a lack of steadfastness in one's character whose modes of thinking and acting will be dominated by all sorts of distractions. Consequently, the activity of each after his own inclinations and without regard to the concentrated activity of the whole, nullifies the highest purpose of the school as a place in which to learn self-control, silence, industry, and non-interference with others. Silence is the proper corrective for those who are afflicted with the morbid desire to attract attention to themselves. The stress that is properly laid on these fundamental school virtues is designed to fit each to do his full share of the world's work and to be able to take care of himself. This is the chief reason why regular tasks or lessons are assigned from day to day for individual absorption, assimilation, reproduction, retention, and their relation to what has preceded and what ought to follow under the most favorable conditions of the learner's environment. By retrospective and relational processes, the learner strives, particularly in the higher stages of his advancement, to get a deeper insight and to seize upon and to master the essentials of the subjects he studies. As he moves onward and upward, he discards in his thinking the more superficial phases of each subject which he first had for the underlying principles that he may build up a logical and consistent scheme of knowledge in each branch he pursues. The learner thus becomes absorbed in his own lines of work, yet he seldom loses interest in what his classmates are doing. Each member of the class is in one sense an investigator and he contributes his mite to the sum total in order that he may enjoy his share of the labors of all the others. Here, again, it is seen that ethical habits can be acquired, and it is therefore evident that the very essence of school discipline is a most potent factor in building up good habits of co-operation with one's classmates which may be easily carried over later into the larger spheres of private and public activities. Rightly, then, do teachers insist on promptness in the performance of every duty, regularity in being present at appointed times in keeping engagements, combined with and reinforced by punctuality. The habit of working silently in the schoolroom is an acquirement of no mean order, because it cultivates individual attention and concentration which, in later years, amid great confusion, enables its possessor to pursue his own line of thought uninterruptedly. The pupil also learns that rights and duties are correlatives, and that while he may insist on his rights, there are also duties to be performed by him, and that others have rights and corresponding duties imposed on them, and that he has no more right to interfere with the rights of others than they have to interfere with his rights; hence, non-interference with the legitimate work of others is

set down as a cardinal virtue. In common speech, it is the attention to one's own business. Unless the habit of industry has become a sort of second nature, a disposition to be doing something that has a definite object and not merely frittering time away in an aimless, dreamy fashion, the strongest personal element of character has not been developed into habit. Habits should sink somewhat below the plane of consciousness so that one acts automatically, and in the right direction as the result of physical and mental control. This is the ability that one possesses to get hold and to keep command of himself, and out of which will come eventually a wider view of ethical relations to one's fellows, and to the conception of an orderly arrangement of the world-process. When one has reached this stage, he has formed the habit of looking at each action rationally by making a direct appeal in each case to his standard of duty. This is the outcome of a gradual system of moral training from following mechanically at first school requirements, and by ridding one of his own whims in readjusting himself to new conditions and more unselfish ideals. Each must get hold of the underlying principles of ethical conduct for himself, altho he may follow mechanically the standards that he finds the world has already fixed without being able to give an intelligible explanation of them, while lacking that clear insight which depends ultimately on a vivid comprehension of fundamental principles.

Each one will, however, by such an investigation of principles, arrive at a theory upon which his practice is based, but it is very desirable that one should accustom himself to look for the basis of his actions on *strictly moral grounds*. It is to be regretted that only a few teachers take pains to inform themselves not only as to the traditions upon which our manners and customs have become the molding influences of our daily life, but fail to get hold of the underlying principles of this great conservative force. In such matters teachers ought to be the molders of public opinion, and exert a positive influence upon the life and character of each child for the twofold purpose of understanding and applying the principles of school discipline intelligently and unconsciously leading the pupil into the habits and practices of good breeding. If the teacher knows what the highest ethical principles are and how to bring them to young and struggling minds so that they may free themselves wisely and in the presence of conflicting duties, then ethical teaching has accomplished its purpose. Training pupils to discriminate carefully in reference to motives that determine conduct in the practical settlement of cases, whether they arise in school or outside, is of vast importance in giving an insight into all duties which have human nature in any form as an elemental factor to be considered.

In fact, as soon as the pupil steps over his narrow boundary into literature, biography, history, agriculture, commerce, manufactures, governmental sciences, philosophy, and religion, he is making moral judgments at every step of his progress and in all his walks in life.

HOW SHALL MORALS BE TAUGHT?

On this point, the divergence of opinions is great. Shall the instruction be positive, direct, formal, and definite according to a fixed program; or shall it be incidental, rather sharply emphasized early in school life, lightened during the intermediate period, and deepened and intensified the last year or two of school attendance? If the first position is assumed, then should the instruction take into consideration the age and the natural aptitudes of each child, or should the pupils be taught *en masse* as in other branches? Each will answer these questions according to his own way of looking at the problem and whether he thinks the plan of attack should be by a flank movement, or by a front assault. It will not be contended, I apprehend, that such training can be taken up and be presented as a formal study that is sharply defined in its scope and character and that admits of logical treatment. The child as the recipient must be regarded as being full of activity and that it will behave itself in some fashion. This activity is impulsive and it needs guidance and control so that it responds to certain stimuli, and that only other stimuli should be minimized or inhibited in order to insure action along right lines of behavior.

The entire training of a child begins with the observance of certain rules. At first it knows no rules for its guidance, and it is kept from hurting itself by others who are older and abler to take care of it. This state lasts comparatively a little while. Soon rules of conduct come to be acted upon, and from this time onward the child is never beyond the pale where rules do not apply. Properly, then, the very first lesson the child must learn is that of *obedience*. This lies behind and beneath all other lessons. When the lesson of *obedience* is learned all other lessons are comparatively easy. This does not imply that the child must be governed by hard and cruel rules. Obedience obtained in this way is unnatural. All animals are best trained by kind and gentle restraints. Only strict rules should be employed in controlling the vicious when more humane measures have failed. The manly boy is the one who obeys; disobedience is childishness.

The first steps in this process came from *obedience* at home. Obedience as such is a consequence of limitations, and "limitations" as a term implies fixed boundaries beyond which one cannot pass with impunity. We say in general terms that a man is free to walk the earth and breathe the air, free to acquire, hold, and transfer property, free to control his own thoughts and bodily actions, yet the word freedom is only a relative one in its application. His freedom consists in his obedience to laws which he cannot change. For instance, the thief as a free, responsible man may take what belongs to another, and thus by this very act steal his own freedom, and yet this is the result of his own folly—namely, stealing to punish himself. Man, therefore, lives his best life by obedience, and so does the child. Obedience signifies that one yields to society, and consequently to the welfare of others,

what is required of him. He simply complies with demands which are made upon all.

The home is the place where quiet, cheerful obedience should be taught. Parents themselves are subject to rules and laws. They must do certain things at stated times. All the work of the day should be done between fixed periods, and the time for one kind of work ought not to lap over the time for another. Every exercise has its duty. On the other hand, should the parent do certain irregular things now and then, the other members of the family become dissatisfied, and rightly so. If the mere whim or pleasure of the individual should be the only rule and guide thru life, disappointments and vexations would characterize every undertaking. In as simple a matter as the running of the street cars there are laws which must be obeyed. Should those whose duty it is to manage and control them decide that the cars should run one or two days only during the week, there would be a general uprising of all the citizens, if not a destruction of the property itself. The law of duty, which is the obligation to do right and from which one never escapes, is as pressing and persistent as the law that holds the planets in their places. Obedience marks the difference between a civilized people and savages. Obedience prepares the way for sympathy and usefulness. It is an outward act, while sympathy constitutes the inner bond that binds one to all and all to one. To be thoughtful of others, to watch and care for their interests, to preserve their reputations, to have a sacred regard for their feelings, are some of the evidences which distinguish the kind-hearted from the cruel and selfish. Society is bound together by the three ties of obedience, sympathy, and usefulness. These virtues should be cultivated in the formation or every character. To these are added truthfulness and honesty as opposed to lying and stealing in various forms. The home life should be like a building which stands firm and strong when its foundation is composed of good material. A rotten piece of timber or stone endangers the whole structure and the same is true of a family, if only one member is lacking in truthfulness and honesty. The dishonest man or boy is a piece of rotten timber that society cannot trust. It is on this principle that parents should insist that their children must be obedient, sympathetic, useful, truthful, and honest. These positive virtues are as so many elements in the structure of human character. Each has a significant value.

ISSUES FROM THE HOME

Whatever is good and pure and clean, or whatever is bad and impure and vile in the life of the individual, has its rise in the home life. Wherever the home life is pure and wholesome, tho it may be the home of the poor and lowly, or of the multi-millionaire, there the lives of the children are nourished under virtuous conditions. It is in the home life where the children are pampered and spoiled and are made shirks and liars and thieves; or they become honest, sincere, truthful, industrious boys and girls. The

boy or girl that has fallen by the wayside is seldom found who has been properly trained at home in the noblest virtues. But those boys and girls who have been spoiled, petted, and mismanaged at home, or whose fathers and mothers have neglected them, or handed them over to nurses, or turned them out on the streets, or sent them into the back alleys, only by a miracle will they become useful and honorable members of any community. What has thus far been said refers to those homes in which the father and mother work together, or neglect their children; but there is another phase of home life that is frequently encountered, and that is when one parent wants the children to conduct themselves properly and the other parent obstructs every attempt thus made. Such dissensions react disastrously on the children. The child thus nurtured becomes self-willed, disobedient, deceitful, and untrustworthy. When parents neglect to see or to correct the faults of their children, there is sure to come a day of reckoning which will bring sorrow and wretchedness to the parental roof, because the soul should be taught the duty to keep under control envy, greed, jealousy, and hypocrisy.

THE RELATION OF PARENT AND CHILD

The relation of parent and child is one of such tenderness and dependence that both parents should always seek to ennoble and elevate the character of their offspring. The child should be taught to hate meanness in every form and to love the true and right, and to practice them in thought and act every day. Owing to diversity of the mental make-up of children, some are naturally quick, restless, enthusiastic, and impulsive; others are always in the sunshine, or far behind a dark shadow, and others, again, are bold, daring, venturesome, always active, willing to let consequences take care of themselves. There are also the slow, plodding, sturdy children, and others along with them who explode on the slightest provocation, while others are so fragile as to have a very slender hold on life. Even in the very same family may be found children of widely different temperamental conditions. Children of all these divergent types enter the schools and several of these most pronounced types may even be found in the same room.

Honesty with children always counts. The parent who practices deception either covertly or openly, or plays sharp tricks, or induces his child to engage in practices that will not bear the severest scrutiny—if such a person can be labeled parent—is false to the sacred trust committed to his care, no matter what his pretensions may be. Children know the difference between a true character and a deceitful one; between honesty and dishonesty. Oftentimes children pass judgment on shady transactions whether the parent or another person is the actor. The old adage, "Honesty is the best policy," is as true today as it was a thousand years ago. The one who scorns to do a mean act, whether in the glare of sunlight or in the darkest hour of midnight gloom, is worthy of the very highest respect.

HABITS THAT SHOULD BE TAUGHT TO CHILDREN

Many subjects need to be presented to the child mind with the consequences most likely to flow from them. Among these may be enumerated the following: (1) shirking honest work; (2) avoiding responsibility; (3) gaining ends by dishonest means.

These tendencies are partly social, partly industrial, and partly ethical. They involve the practical duties of life. Affecting the child's mind permanently is his attitude toward certain lines of thought and action which depend on sensory ideals and motor reactions that tighten into character.

There is undoubtedly a very close connection existing between the intelligence, the honesty, and the industry of the nation, and its social and economic conditions. No large ideas originate in ignorant minds. A wide expanse of deep thought is the only sure method that will enable one to go to the bottom of things, and to be inspired to aim at the best in all things in thinking and doing.

I. Work is not relished by most people. The history of the human race has always been a contest between those who directed work, those who avoided it, and those who tried to avoid it. Most people work because they cannot get along without it, realizing that work is a decree pronounced upon man by the course and constitution of his environment. In this must be recognized the activity of play, the activity of work, and the activity of drudgery. To work or to starve are alternate propositions. To heed the one is life; to accept the opposite is physical and spiritual death. Everything depends here upon the right choice. Home habits have more to do with work than the school. All that the school can do is to train pupils into habits of industry, punctuality, silence, strict attention to business, and the realizing of higher ideals thru sacrifice.

II. In the life of each person come critical periods—crises, so to speak—when important decisions have to be made. Upon a single issue at such a moment one's success in life may depend. Everything now depends upon how one thinks, resolves, and acts at the supreme moment. Responsibility has to be shouldered, not shifted. A firm, vigorous character, such a one as accepts issues as they arise, estimating them at their true worth, is of more value to a community or a nation than thousands whose wills are unstable as water and can be swerved by every breath of hasty public opinion that blows. To watch and help a human soul to grow is one of the grandest and most sublime sights that one can behold in connection with the family life. For such lofty ideals and the successful execution of such work, clear-sightedness, promptitude, ready resources, quick and vigorous conceptions, cool self-possession, and a commanding self-survey of the whole situation involved, are prerequisites for success. These sterling qualities should be nurtured and developed to their utmost limit in the home life.

III. The boy that will lie and cheat on the playground in order to win a game, or to get the better of a schoolmate in a trade, or will tell lies on the

girls, will do all these things in a greatly aggravated form when he grows up to manhood. A boy that will slip up to a farmer's wagon and steal apples or peaches, or will pick up things at the door of a grocery store when the proprietor is not looking, is taking rapid lessons for admission to the penitentiary. Parents should always strive to inculcate good habits and upright conduct in the minds of their children, and never shift this work to others. Let the important lesson of "*mine and thine*" be insisted on a thousand fold more than it is. This fact, too, should always be borne in mind—that the descent into the realm of crime is always by easy steps, and never by a single bound.

MAKING CHILDREN OVER

There is a meeting-point in the child's life when it comes under formative influences, and that is when it is placed under the charge of the teacher, this being a supplementary force to that of the home environment. This is the proper relation that should exist between these two controlling forces. The teacher, however, has to take children as they come to school from the homes in which they live. At the beginning, the thoughtful teacher is confronted with the old, old questions: "Can a man make himself over? Can a leopard change his spots, or the Ethiopian his skin?" What answer does education give to this question? Is there a strong typical resemblance among educated people of all kindred nationalities, as there is said to be among the thieves of Europe and America? If there be those who need remodeling, can they be materially and spiritually changed by the aid of educational surgery? All these questions, when stripped of superfluous verbiage, simply mean that if we would produce a better class of people than any now existing as a nation, there must be insinuated into some hereditary dispositions nobler aspirations that will counteract and reinforce some transmitted traits. To uplift the lower strata of human nature, is to substitute higher motives for lower ones in order that the social mind may be moved thru the feelings to higher intellectual and moral conceptions of life and duties. Under whatever name this work is to be undertaken, it is teaching. Teachers must accept the material sent to them in its crude state, and if some of it be faulty, they endeavor to improve it by the application of such influences as they control. That general vagueness called humanity has transmitted with the life of each individual both good and bad traits. In the composition of each one's mental and physical equipment, the accumulated inheritance both of mechanism and function imposes on education a dual process—a destroying going hand in hand with an up-building process. Unless the forces of education be moved in the right direction, the pupil may be injured, when the aim is to help him. The child must be docile, that is, in the right frame of mind, susceptible to the learning influence; and if not, then the teacher must bring about the necessary changes thru the medium of skill and patience. Two possible variations may arise: the

teacher becomes impatient, or the pupil grows intractable. Either is fatal unless the cause be removed. A keen analyst can hardly tell which is more dangerous to the child. Occasionally heroic treatment is demanded for the intractable pupil, in order to bring into active co-operation a better attitude of mind. Should the pupil be deficient in receptive power, whether of discipline or instruction, the teacher must first bring to bear such an influence as will, if possible, produce the desired result. Great is the teacher who reads human nature as it is. Youngsters may be sent to school perfectly docile, or as untamed as young tigers, but the solvent kindness will tame the ferocious hyena, as well as the more kindly disposed animals. Unless the physical and mental deficiencies are extremely abnormal, the savage nature of the most refractory pupil will yield to the same subtle influences. What is herein indicated may not reach every case, but it will win most of them, leaving a small remnant—the incorrigible—to suffer the consequences of their own folly.

No provision, it may be argued, is left for those sudden explosions of temper which sometimes burst forth without a moment's warning, crimes as it were, without malice aforethought, that need immediate attention. Such ebullitions of passion are exceedingly rare, and are not serious unless they lead to manslaughter, or the brandishing of dangerous weapons. It is better, in applying remedial agents, to proceed at a very moderate pace. Universal experience is that one heated by passion will probably act rashly. By slow degrees, then, the character may be largely modified by neglecting or suppressing certain traits and stimulating others. In this sense pupils may be remodelled. To indicate the path of action is as much as can be done to encourage and inspire the thoughtful teacher. Each case requires different treatment since there is no universal science of human nature.

By nature a very large preponderance of pupils in any school are inclined to study and to be obedient, while only a few, comparatively, will be disposed to annoy the teacher or disturb other pupils. The troublesome pupil soon finds out that he can annoy his teacher incessantly. She, if nervous and irritable, in turn scolds, threatens, corrects him every hour of the day. Still the very fact that he is capable of annoying her affords him infinite satisfaction, and so the struggle goes on growing more and more acute each day. The end is approaching—one result—the pupil is suspended. The suspension may have been necessary to preserve the discipline of the room. If the suspension is so used as to teach the pupil that he brought disaster upon himself in consequence of his disobedience then he will have learned a wholesome lesson by facing his own deeds. It is at this point that his mental attitude may be of incalculable benefit to himself or an irreparable injury.

Many questions involving the gravest consequences confront American society. The stability of an institution depends upon the strength, the intention, the coolness, the firmness of each active unit. If the central forces in each individual unit be properly adjusted and regulated, no great

upheavals, unless founded upon the eternal principles of justice, can ever shake or rupture what has been wrought out in the interest of humanity. False notions and erroneous views must be eliminated and more wholesome ones substituted. To set each subject as well as each action in its proper light is the duty of parents and of teachers. The place of beginning this great work is in the home and around the fireside and then continued in the schools.

THE SCHOOL LIFE

As a rule the public-school teachers cannot have direct physical and spiritual control over the pupils to exceed eight hours each day and then not to exceed two hundred days out of the three hundred and sixty-five days of the year; that is, the teacher may possibly have direct supervision of the child 1,600 hours a year, while he is under the influence of the home 7,166 hours each year, and this ratio exists only while the child is in school and is in regular attendance each day. This is a fair statement of the question of control, which carries with it the placing of responsibility where it belongs.

CHILDREN'S SCHOOL HABITS

It is assumed that when a child starts to school he is sent there for certain definite purposes, and the primary essentials to be obtained by him in his development lie in three directions, namely, character building, physical exercise, culture and book learning. In all these directions the child's life acts and reacts upon himself, society, and on his natural surroundings. These complex relations arise out of the pre-existing conditions of the family, of society, and the aspects of nature.

These little things which make the individual life a unity in all his dealings and relations with others are called character, and by this he is judged.

The universal judgment of all fair-minded men and women is against selfishness; yet there is a great deal of selfishness everywhere. The selfish man is the one who acts chiefly on his own account, and acts as if other people exist only to gratify his desires.

In a tolerably apt sense the school represents society. There are grouped in a school all kinds of minds; plastic it may be that some of them are, yet the miniature aggregation of men and women may be taken as fair types of what active life really is in the outside world.

There is in the school, as there is in the community, a common life which is felt in many ways. When a man so far forgets himself as to commit a crime, the act shocks the community in which he lives and perhaps sends a thrill of horror thruout the state or nation, owing to the magnitude of the offense. When it assumes this latter phase, the crime is of a heinous character. Should the crime be a mild one, and the punishment of the offender unduly severe, there is reaction in public sentiment in favor of the one who is unjustly dealt with. So, in whatever sense an offense is

viewed, it comes directly in contact with the ideal right in the public mind. Children, also, whose notions of right and wrong have not been perverted at home before they entered school, will unanimously pass a fair and just decision in regard to the acts of their classmates or of their teacher concerning the affairs of the school. They are just and fair judges, unusually just to themselves as well as to others.

Since the school is the pupil's place of business, he should attend to business there. This means that he should be regular in attendance, and quick and willing to do whatever is required of him. He has no more right to waste the time that belongs to others than to waste his own time. To be at school on time is his duty. Besides, he should be neat and clean. Water and soap are cheap in this country. A dirty person ought to clean himself up before he goes among others, but if a child is too small to prepare itself properly for the schoolroom, then the mother should prepare it.

The school, too, is essentially a place for work, incidentally for play and the inculcation of good habits. It is designed to touch the child on four sides of his nature—to take care of his body, to develop and expand the the intellect, to control the emotions, and to regulate the will; because it is the self-governing as well as the self-regulating power, and our entire theory of government is based on intelligent self-control. The citizen must be able to control himself and be subject to law. He is further fashioned on the side of his moral nature thru his emotions, affections, and desires. He must be taught to respect the rights of others, their privileges, duties, obligations, and responsibilities. Here, incidentally, should be spread out before the child all these nobler traits of character which the good value most highly. Added to these are those great intellectual achievements which come from the study of books and in coming in contact with men engaged in the practical affairs of life. As one has forcibly expressed it: "Man possesses the power to know, the power to do, and the power to feel. The highest mode of man as a power to know is—Science; the highest mode of man as power to do is—Government; and the highest mode of man as power to feel is—Religion. To know the world, to wield the world, to experience infinite satisfaction that comes from doing good in the world—these combined form the truest type of human greatness."

Good teaching itself is a moral force. Paraphrasing the remarks of a noted American divine: "To have teaching judgment, to have a good teaching head and heart, to have a deep interest in teaching, to have a deep enthusiasm in the highest and best kind of teaching, are the qualities that will develop the good in the children." A good teacher must have a strong, but not a harsh will, and must be a lively worker; the judgment to perceive, the enthusiasm to inspire, the will to resolve, and the resolution to act. To these high qualifications there must be added the power of analysis, the ability to simplify a complex subject, and to show clearly, distinctly, and separately all its component parts, and to get them together as syste-

matically as they were taken apart; otherwise the attempted work of teaching is as uninspiring as that of moles in their underground passages.

MORAL TRAINING IN SCHOOL

While the entire theory of our national and state governments rests upon the distinct separation of civil and religious doctrines, yet ethical instruction, or the essentials of the science of morality, should be inculcated by precept and example in every school and among all grades of pupils. Such instruction does not interfere with the religious convictions of anyone.

Historians inform us that in the very earliest accounts of Egyptian history, the supreme justice wore at all times a badge which meant "truth," so highly did this nation value sincerity and honesty in all their dealings.

Teachers often have a strong, up-hill pull, not that the school children are in general untruthful, but that too many children have learned the art of deception long before they enter school. There are so many other ways of acting an untruth than in saying it that children, almost unconsciously, drop into deceitful practices by imitating their parents. They are, too, reinforced and confirmed by some of their teachers whose imaginations are too swift for their memories and judgment.

Again, let it be emphasized that the pupil should be honest in school, and this applies with still greater force to the teacher. A dishonest, deceitful teacher should never be permitted to come in contact with children. There are many little ways in which one's acts may squint toward dishonesty, such as false excuses for absence, or failures in class-standing, borrowing articles and never returning them; besides, a species of neglect in regard to care of public property is entirely too prevalent in this country, and this disregard leads to still greater evils. Teachers can do much to correct public sentiment on this point. An enlightened conscience is the highest ideal for the guidance of thought and action.

HOW TO TRAIN PUPILS

The following examples are designed as illustrative lessons in moral training as distinguished from moral instruction, drawn from the schoolroom, the home, and the state, and to point in the direction that such instruction may take.

Rights and duties must be treated in practical training as correlatives in order that the pupils may perceive unmistakably that where a right exists, an obligation to perform a certain duty is an invariable concomitant, and that both are equally binding on the individual. Some of these correlatives will be illustrated by concrete examples:

1. *A Fight and How It Was Settled*

Two schoolboys, each about twelve years old, engaged in a fight one day at noon on the playground. One of these boys was red-headed, named

Rufus Parcells, and the other was black-headed, named Randall Kitt. They were not quarrelsome, they learned their lessons well, and were boys of spirit. A dispute arose over an incident that occurred in a game which they were playing, and Randall called Rufus a liar, and the fight began at once. The writer and other boys separated them. The teacher was a sturdy character, an excellent instructor, and a good disciplinarian. After school was taken up, and all the pupils were seated, the teacher called these two boys before him. They took their places on the floor, each having a determined look in his eyes. They admitted that they had fought, and neither showed any sign that he was sorry for what he had done. No pupils were examined, because these two boys told what had occurred. The teacher asked them if they would fight each other again if they had an opportunity. Each boy said "yes." After a moment's reflection the teacher said, "Randall, will you agree never to mention this subject unless Rufus first mentions it to you?" Randall replied, "Yes, sir, but I will lick him good if he ever does." He then asked Rufus the same question to which he replied, "I will not start it, but if Randall does, I'll whip him."

The teacher then said: "Boys, I shall depend upon your keeping your word as honorable, truthful boys, and now I state the question myself so that there shall be no misunderstanding," and they agreed to the statement as being just and fair.

"Now," he said, "Rufus, you take Randall by the hand and tell him that you will never mention this subject unless he first speaks of it, but if he does that you will lick him." The boys joined hands, Rufus told it over to Randall, and then Randall repeated the same to Rufus, each agreeing never to mention the matter, and the solemnity with which this proceeding was conducted all the way thru made such a deep impression on the other pupils that they felt it to be too sacred a thing between the two boys to be mentioned.

A few years later the Civil War came. Randall went into the Union Army and served thru that terrible strife of carnage and death. Rufus was on the other side. Both were then young men, and so it happened that after peace came, they were both students in the same state normal school, and their former teacher was a professor in that school. They met now as men. Their compact had been sacredly kept. They were as firm friends as Jonathan and David, or as Damon and Pythias. It was delightful to see these two men and their friend, the professor, laugh over the incident, and they complimented him on his skill in settling the affair in such a manner as to bind them so closely together in all after-life, and they volunteered the suggestion that if our statesmen had known better how to manage people, a great war might have been averted.

Here was a lesson in courage, honor, obedience, fidelity, and self-control. The case was investigated, the compact proposed, agreed to, and ratified in ten or fifteen minutes.

The teacher wisely refrained from delivering a lecture on the evils of fighting. He let the matter rest with the pupils to think it over, and for each one to apply it to his own case.

If one looks more closely into this case, which is such a one as is likely to occur in any school at the present time, the virtues that stand out most prominently in the character of these boys were *courage* and *honor*.

Each virtue has its opposite defect or vice, and as opportunity arises from an occurrence or incident, the teacher can illustrate and enforce, at the right moment, in a few well-directed sentences, the essential points with the virtue involved. Both boys had manly courage in abundance. The opposite defect—cowardice—was absent.

To give point to this incident, there is a lesson in an old second reader, entitled "True Courage," which represents three boys on a cold winter's day passing by a schoolhouse. The eldest boy was a mischievous fellow who was always in trouble, or trying to get others into trouble. The youngest, George, was a good boy, but lacked moral courage. The story recites how Harry and James bantered George till finally he threw a snowball against the schoolhouse door, and then later received a whipping as he richly deserved. The lesson here taught is that one must act up to his highest convictions of duty, irrespective of the flattery or censure of others.

2. *At the Battle of Fredericksburg*

An incident is related to this effect that during the afternoon of the terrible and bloody repulse of the Union soldiers in trying to drive back the Confederate soldiers at the stone fence and on Marye Heights, after one of the most bloody charges, and the recoil of the Union soldiers, a Confederate soldier, a mere boy, leaped over the stone fence without a gun in his hand and ran quickly to where a wounded Union soldier lay who was piteously calling for water. As soon as this young boy jumped over the wall, guns were leveled on him, but no one fired. But when he knelt down beside the wounded man, and raised his head and held his own canteen to the wounded man's lips, a shout from the men on both sides rent the air.

This noble youth when asked later why he had taken such a risk where the balls from the Union muskets could sweep over every foot of that meadow, simply replied: "I could not bear to hear that poor wounded soldier, tho an enemy, calling so piteously for water, without relieving his suffering."

The incident related of Sir Philip Sidney and the dying soldier at the Battle of Zutphen is not so touching and heroic as is the one of this young Confederate of Lee's army.

3. *A Duty to Work*

Even small children understand how it is that every man lives upon the fruit of his own labor or upon the fruit of the labor of others.

A good illustration of this truth is given in one of the popular school readers, under the title "The Good Boy Whose Parents Are Poor." This little boy rises early in the morning, and he helps his father and mother as much as he can before he goes to school. When he goes to school he walks quickly and does not lose any time on the way. He is glad that he can work, and when he is in school he learns all his lessons well.

Let the teacher contrast this little boy's conduct with the one who is lazy and shirks every duty. It is by drawing such pictures in strong contrast that the pupils are trained to do certain things and to eschew others. Place beside each other on the blackboard, the virtue and its vice, or defect, so that they can be analyzed and properly classified by the pupils in the room. Take *work*, and its opposite, *laziness*, put them on the board before the pupils when some incident has occurred to give a background to the setting. No life has so little in it as the idle life, and especially the idle life of the rich man or woman. The idle rich man gives little to the world and gets much from it. The able-bodied man gives the world as much or more than he consumes. It is industry that conquers in this world. The industrious man or woman will do thoro, honest work, and give to the world value received for what he or she consumes, besides adding something to the world's capital stock. The result of such a man's work is wealth under one or another of its diverse forms. It may be the most valuable kind of wealth—intellectual or spiritual wealth.

Laziness is the worst sort of vice, because it sacrifices the higher self to the lower self—it places temporary indulgence for the remote permanent interest. Laziness is the open gateway to poverty in its most hideous and degrading forms. Where industry is wanting, poverty and wretchedness are sure to be found.

Let the lesson be brought home to the child so that he will never be ashamed to work. Boys as well as girls in the cities should learn to do some kind of housework. A boy will feel better if he takes care of his own bedroom, and makes it look a little neater and tidier than it had been before. It is far better for a boy or girl to live on plain wholesome food and work some each day, to learn habits of industry, than to spend his days in the back alleys where contamination grows most luxuriantly. Work as a Duty, as Virtue, has its Reward; its opposite, Laziness, as a Vice, has its Penalty. Then as each virtue is brought into the school incidentally, it should be presented in both lights as previously indicated, the pupils leading in working out the outline from such material as they can command. The spirit of self-help is indeed the mainspring of all genuine worth.

4. *Constancy*

There is not on earth a spectacle more worthy of the regard of good men than to see a great mind superior to its sufferings. The following classic story is an excellent example of this statement:

"After the Carthaginians had defeated the Roman army, and taken Regulus, that illustrious commander, prisoner, they met with such a series of misfortunes as induced them to think of putting an end to so destructive a war by a speedy peace. With this in view they began to soften the rigor of Regulus' confinement; and endeavored to engage him to go to Rome with their ambassadors and to use his influence to bring about a peace upon moderate terms, or at least an exchange of prisoners. Regulus obeyed his masters, and embarked for Rome, after having bound himself upon a solemn oath to return to his chains if the negotiations did not succeed. The Carthaginian ship arrived in Italy; but when Regulus came to the gate of the city, he refused to enter it. 'My misfortunes,' he said, 'have made me a slave to the Carthaginians; I am no longer a Roman citizen. The Senate always gives audience to foreigners without the gates.' His wife, Marcia, went out to meet him, and presented to him his two children; but he, only casting a mild look on them, fixed his eyes on the ground, as if he thought himself unworthy of the embraces of his wife and the caresses of his children.

"When the senators assembled in the suburbs, with the view of receiving him, he was introduced to them with the Carthaginian ambassadors; and, together with them, made the two proposals wherewith he was charged: 'Conscript Father,' said he, 'being now a slave to the Carthaginians, I am come to treat with you concerning peace, and an exchange of prisoners.' Having uttered these words he began to withdraw, and follow the ambassadors, who were not allowed to be present at the deliberations and disputes of the Conscript Fathers. In vain the Senate pressed him to stay. He gave his opinion as an old senator and counsel, and refused to continue in the assembly until his African masters ordered him; and then the illustrious slave took his place among the Fathers, but continued silent with his eyes fixed on the ground, while the more ancient senators spoke. When it came his turn to deliver his opinion, he addressed himself to the Conscript Fathers in the following words: 'Though I am a slave at Carthage, I am free at Rome; and will, therefore, declare my sentiments with freedom. Romans! It is not for your interest to grant the Carthaginians a peace, or to make an exchange of prisoners with them. Carthage is extremely exhausted; and the only reason she sues for peace is because she is not in a condition to continue the war. You have been vanquished but once, and that by my fault; a fault which Metullus has repaired by a signal victory. But now the Carthaginians have been so overcome, that they have not the courage to look Rome in the face. Your allies continue peaceable, and serve you with zeal. But your enemies' troops consist only of mercenaries, who have no other tie than that of interest, and will soon be discharged by the republic they serve; Carthage being already quite destitute of money to pay them. No, Romans, peace with Carthage does not by any means suit your interest, considering the condition to which the Carthaginians are reduced; I, therefore, advise you to pursue the war with greater vigor than ever. As for

the exchange of prisoners, you have among the Carthaginian captives several officers of distinction, who are young and may one day command the enemies' armies; but as for me, I am advanced in years and my misfortunes have made me useless. Besides, what can you expect from soldiers who have been vanquished and made slaves? Such men, like timorous deer that escaped out of the hunter's toils, will ever be upon the alarm and ready to fly.' The Senate, greatly affected with his disinterestedness, magnanimity, and contempt of life, would willingly have preserved him, and continued the war in Africa. Some were of the opinion that in Rome he was not obliged to keep an oath which had been extorted from him in an enemy's country. The Pontifex Maximus himself, being consulted on the case, declared that Regulus might continue at Rome without being guilty of perjury. But the notable captive, highly offended at this decision, as if his honor and courage were called in question, declared to the Senate, who trembled to hear him speak, that he well knew what torments were reserved for him at Carthage; that he had had so much of the true spirit of a Roman, as to dread less the tortures of a cruel rack than the shame of a dishonorable action, which would follow him to the grave. 'It is my duty,' said he, 'to return to Carthage; let the gods take care of the rest.' This intrepidity made the Senate still more desirous of saving such a hero. All means were made use of to make him stay, both by the people and by the Senate. He would not even see his wife, nor suffer his children to take leave of him. Amidst the lamentations and tears of the whole city, he embarked with the Carthaginian ambassadors, to return to the place of slavery, with as serene and cheerful a countenance as if he had been going to a country-seat for his diversion."

Teaching by Contrast

There is a wide difference between the description of an act and an explanation of it. The best training in morals consists in using both methods —describing an act and explaining it. The highest outcome of all teaching results in character formation without which there is nothing great in man. Professor C. C. Everett, in speaking of the internal traits of Fichte as a man, said: "This was made up by an energy that could hardly be surpassed, of a power of love that was his inspiration, and of a passion for truth and for righteousness that pressed toward absolute satisfaction."

The theory of all moral training is based on two simple principles: (*a*) arousing the feelings so that the child will pass judgment upon the moral quality of the action; and (*b*) the determination of the child to put his decision into the thing that ought to be done. These two underlying principles may be briefly expressed thus: Judgment and feeling combined, followed by doing. Unless the decision which arouses the feelings results in doing, moral training is abortive.

In developing the right notions in the minds of children, concrete

examples that have fallen directly under their experience, or such as may be brought within their sphere of comprehension, will serve the purpose best.

The reading lessons will furnish sufficient material for the inculcation of good habits and their opposites. Perhaps the most striking illustration touching obedience is the reply that Mrs. Washington, the mother of General Washington, gave to the French officers at the banquet given to the allied officers soon after the surrender of Lord Cornwallis. A distinguished French officer asked Mrs. Washington, on that occasion, how she managed to raise such a splendid man? Her simple reply was: "*I taught George to obey.*" Would that every American mother would practice the same method now!

THE CHOICE OF A SPECIAL CALLING

That a child from mere impulse should choose early in life what vocation he will follow and stick to his choice permanently, is not to be expected except in very rare cases, and yet after a choice in due time has been made, it ought to act as a moral support on the character amid the din and strife of conflicting influences. It is vital that one ought not to be severed from his particular line of duty. The sense of personal honor, family traditions, and many other subtle influences have a strong tendency to strengthen moral character, if the proper setting has been given to the pupil's bent of mind.

With the active and conscientious teacher the main question in the field of ethical instruction is how to present living issues within the experience of girls and boys in the elementary and in the secondary schools, issues which these pupils have already begun to discuss, but which they rarely carry out to a finality. The best material should arise out of concrete cases which in some manner connect themselves with some familiar aspects of everyday life. To widen and deepen the sympathies of the pupils from personal experience, biographical and literary readings, interspersed with illustrations from various sources not given as lectures "on being good," but full of such meaning as can be put into some part of the incident, is worth more to the pupils than any overwrought discussion, however finely spoken.

To lead a class out into an open field, definite questions, before a subject is formally presented, are of incalculable value acting as a starting-point about which principles will definitely cluster. Such a method will cultivate the scientific habit of gathering and weighing facts as to their relative importance in awakening a cautious attitude of investigation before jumping at conclusions, based on inadequate evidence. To think out problems of conduct in a broad, sympathetic, and rational manner, and to act in conformity thereto, is the essence of all ethical training. As the pupils advance in their studies from lower to higher grades, they ought to grow more alert in finding out the truth in each case, whether it be a real or hypothetical case, and strive to convince their classmates and teacher of the soundness of their decisions, and to be open-minded on all questions upon which differ-

ences of opinions have existed. All ethical lessons ought to be lessons along the lines of moral thinking and acting. A character can only become strong and fixed in its struggles and conquests over temptation, and not by acting good all the time. One must also find his place on all burning questions in the ranks of those who know where, when, and how to take their places in the community, state, or nation, at the right time. When one has found his place of work for life, it is his duty to adhere to it, otherwise life is meaningless. Loyalty to one's chosen work contains all the elements out of which one's life must manifest itself. This is the permanent interest that each should have to stimulate him thru life's journey.

RELATION OF MORAL AND RELIGIOUS TRAINING

CLIFFORD W. BARNES, EXECUTIVE CHAIRMAN, INTERNATIONAL COMMITTEE ON MORAL TRAINING, CHICAGO, ILL.

The discussion of this subject invites us to sweep the whole gamut of philosophical thought, both ancient and modern, to discourse wisely on natural and revealed religion, and to enlarge upon the meaning of the categorical imperative, in a manner that would have delighted the soul of Immanuel Kant. But let it suffice for our purpose to say that, judged from the standpoint of abstract philosophy, the relation between morals and religion is very close, and whether we arrive at our knowledge of God thru a recognition of duty or recognize duty thru a knowledge of God, there is something in the moral imperative that links the human with the divine, something in religion which must find expression in moral action, and in moral action which finds its chief dynamic in religion.

Leaving, therefore, the academic for the practical discussion of the problem, especially as it pertains to education, we find that the closest relation has always existed between moral and religious training. In the early days of our own country the *summum bonum* of education was a course in biblical literature and theology that would do credit to a modern church seminary; the spelling-book, the reader, and even the arithmetic obtaining a large proportion of their contents from the Sacred Scriptures. Moral training was not intentionally neglected, but it was considered such a natural and inevitable resultant of religion that it received little attention.

Our own system of education was but the counterpart of that which existed in Europe at that time, and which, indeed, has existed in much the same form for many generations. Speaking in general, it may be said that all civilized and even the so-called barbarous nations have always made religion the rock foundation and the most pervasive force in education, while moral action has ever been considered its true expression in the lives of good citizens. Of recent years, in the more progressive of European countries, there has been a steadily growing feeling of dissatisfaction with the

results of religious training. Somehow the Bible stories have not always been transmuted into ethical principles, active in the lives of pupils, and there has seemed to be a dangerous gap between precept and practice in the routine of daily affairs. During the past year, in many of the schools of England the scriptural lessons have been so arranged as to constitute a systematic course of moral instruction; and in Germany a league has been formed to make religious teaching more ethical.

But, however you look at the problem, in the abstract or the concrete, thru the eyes of philosophy or the records of history, moral training and religious training have ever gone hand in hand, maintaining the closest relation to each other, finding strength in union and weakness in separation.

It is unnecessary to recall to your minds those changes in our national life which have gradually eliminated all religious *instruction* from the public schools, and made our system of education nominally secular. That system is here to stay, and it is our duty to accept it gladly, as a part of God's wise providence, and do our level best to make it most effective in the training of the young. There is, of course, no question as to the propriety or desirability of so arranging this system of education as to give the first place to moral training, for in the very nature of things all else should be secondary. But, in the light of that which has gone before, how are we going to have a vital morality without the introduction of that religious instruction which is forbidden? or, stated somewhat differently, what relation can be established, in the public schools of America, between these two essentially complementary factors—religion and morality? Briefly answering this question, I would say:

1. In teaching morals one should yield to the philosophical requirements of the situation and acknowledge the religious basis on which morality rests. Surely we may be permitted in this country to speak with greater freedom concerning the general subject of religion, than they who live in that land of religious controversy, sometimes called "Godless France." Yet that government, in its official program, urges upon its teachers to show the relation between the moral and divine law, to inculcate in their pupils a reverence for God and religion, and to be attentively respectful at any service of the church.

2. As one makes use of that best medium for the teaching of a moral lesson, i.e., the biography of a good man, it can properly be shown how large a part religion played in the development of character and in the winning of success. There need be nothing here of dogmatism or theology, but a simple recognition of the historical fact that one of the mighty influences in the life of any man is his religion, be he Protestant, Catholic, or Jew.

3. Formal worship once a day should be the universal practice in the schools of America. If at the basis of all moral teaching we come in touch with the divine, and if the chief aim of education is to promote moral training, surely we are illogical and foolish beyond measure to prohibit the recog-

nition in some formal way of that first great underlying Cause, whom some call "Lord," "Our God," and "Heavenly Father." When the juror, and the witness, and the client before a notary are no longer asked to swear their affirmation in God's name; when our judges, and our congressmen, and other public servants, are permitted to assume their solemn obligation without taking oath of office on the Word of God; when the President of these United States refuses to issue a Thanksgiving proclamation in acknowledgment of the blessings of Almighty God; when Congress, by deliberate choice, refuses to elect a chaplain, or be led in prayer, and strikes from our coin "In God we trust"; and when the laws of the land so change their character as to give no recognition to God's holy day and divine authority, then, and not till then, will the public schools of America be justified in omitting all forms of daily worship. It is needless to enter here upon the discussion of this much-mooted question, but I cannot refrain from saying how monstrously absurd and sinfully dangerous I consider it to be for any organization controlling the educational force of a great sin-burdened city to deliberately refuse official recognition to the greatest power in all the world which makes for righteousness.

4. The atmosphere of the school may be a medium for the introduction of religion. This will require no stating of creed, no expression of belief, nothing that might be called pietistic or sanctimonious, but only a pervasive spirit of light and joy and happiness, a sort of general understanding that life is a great and beautiful gift of God, not to be used for sordid purposes, but rather as a means of serving others to the limit of one's ability. This will be religion, pure and undefiled, admitting of no sectarian controversy, but exerting a tremendously vitalizing influence on every effort at moral training. The source of this religious atmosphere is not the school in which we find it, but the church and the neighborhood. A score or more of antagonistic denominations will help to make it, a thousand different faiths will enter into it, the Bible story, the pastor's prayer, the mother's counsel, the father's command, these all will do their part, while underneath there runs a steady current of religious conviction, sweeping down from the days of our ancestors, to keep the hearts of the children strong and true. This is not some strange illusion of an idle dreamer, for here and there one finds a school whose life and spirit answer well to this description, and the religious element which pervades it in this atmospheric manner is a powerful reality working mightily for good. The church and the home may well feel a new sense of responsibility, as it thus becomes clear that the correlation of religion and morality in our system of education is so largely dependent upon them. Religion in the individual is good; but it becomes a better and greater thing when, multiplied a thousand fold, it gives the spirit of religion to the town, the school, and the nation.

5. The teacher, thru his personality, should bring religion to the aid of morality. Considering my words very carefully, I have no hesitation

in affirming that an irreligious person has no right to teach in a public school.

Do not understand me to mean by "irreligious" a person who lacks membership in some one of our many churches. I mean by "irreligious" a person who fails to perceive any relation between the finite and the infinite, who recognizes no supreme good in the universe, who has no consciousness "of a power not himself that makes for righteousness." Such men are often caught by the tide of wholesome life which surrounds them on every side, and are carried on to the achievement of a noble career. But as teachers of the young they lack in the spirit of reverence, in the discernment of true values, in the power to quicken high ideals, and in that love for self-sacrifice which the Great Teacher taught his disciples. I know there are some whose faith has been twisted and dwarfed by the blows of misfortune until its form is strange beyond words to describe; and there are some who by nature and training can only bow the knee, like the Greeks of old, before an altar inscribed "Agnosto Theo" (to the unknown God). But such men are not irreligious, for with patient hope they look forward to a day of clearer vision, and with glad sacrifice they lend a helping hand to others as they walk the road toward the better life. Religion, even such religion, expressing itself in the person of one who is honored and loved, is worth ten thousand homilies on theology, or as many chapters learned by rote from the Holy Book.

Summing it all up, very briefly, we believe that moral training should be increasingly emphasized in our system of education. To be most effective it should never be divorced from the element of religion with which it has always been closely related by the theories of philosophy and the history of events. Under the conditions which exist in our country today, it lies within the power of our educational authorities to develop an increasingly strong and vital connection between these two important agencies, by a clear statement of their mutual dependence, a fair portrayal of their joint influence on the lives of men, the observance each day of some public worship, the wise use of potential and pervasive religious atmosphere, and last, but not least, by the life and character of the honored teacher, who himself is sincerely religious.

STATUS OF MORAL TRAINING IN THE PUBLIC SCHOOLS

CLIFFORD W. BARNES, EXECUTIVE CHAIRMAN, INTERNATIONAL COMMITTEE ON MORAL TRAINING, CHICAGO, ILL.

Unless the signs all fail us, we are nearing the dawn of a new era which bids fair to form a better setting to the song of the Herald Angels than any which has gone before. It will form no rival to the Victorian Age with its development of arts and letters, and industrialism will point to other eras for her most wonderful achievements, but it will win a glory greater

than these and far more lasting, for the hearts of an eager people will beat in sympathy with that of the Christ when he took little children in his arms and blest them, and said: "For of such is the kingdom of heaven, and whosoever shall offend one of these little ones, it were better that a millstone were hung about his neck and that he were drowned in the depth of the sea." Perhaps, as the dawn grows brighter, someone will call it "the Children's Age."

One of the significant signs of the times is the marked attention which science is giving to the lifting of some of the burdens so long and patiently borne by the children of the poor. Helpless infants are kept from the blindness which follows improper attention; the lame are taught to walk, and the weak to become strong; the spread of contagious diseases is prevented, and the awful law of heredity is stripped of half its terror by the wise use of training and environment.

The city of Glasgow has just completed a careful series of experiments which go to prove that children of bad parentage, if removed from vicious surroundings and carefully trained, can be made into upright citizens, with only a small percentage of failure; and the Bernardo homes for slum children in London are collecting ample statistics corroborating the same fact.

Municipalities are awakening to a new sense of their responsibility toward the right development of child life, and in addition to the large gifts made for public education, they are generously establishing playgrounds, gymnasiums, bathing-beaches, bathhouses, and other agencies which afford pleasure and recreation, as well as juvenile courts and such associations as promise protection for the weak and the ignorant. Child labor laws are receiving the attention of state and national legislators to a remarkable degree, and woe betide that corporation which attempts to withstand the strong tide of public opinion demanding not only fair play, but generous consideration for the children who have to toil.

But most significant of all the signs which herald the coming of this new era is the earnest effort being made by educational authorities to increase the efficiency of the public schools as an agency for the development of character. The schools have always aimed at this high ideal, and that which most stirs our hearts as we read the lives of the great teachers is their splendid struggle to attain this end. But, tho much has been done in the past, there is a deepening sense that our schools should become more effective along these lines, and that there are special conditions of ominous portent which make this demand doubly imperative at the present time.

Criminologists who have examined most carefully into the facts relating to juvenile delinquency speak in a rather discouraging way of the influence exerted by our public schools in the prevention of crime. The various church organizations to which we look for spiritual leadership and religious education do not hesitate to reveal an unfortunate state of affairs. The

attendance at Sunday services and mid-week meetings is growing steadily less. The Sunday schools fail to reach as many of the children in proportion to the population as they did in former days, and the scholars remain under their care a shorter time. The authority of pastors and religious teachers is not what it used to be, and as the result of historical research and higher criticism only partially understood, many old beliefs have been swept away and even the Bible, for some at least, has lost much of its wholesome influence.

The homes themselves, the very nurseries of our childhood, seem to be undergoing a silent process of deterioration, in which one of the prominent symptoms is the disinclination to undertake a careful and systematic training of the young, and, instead, a willingness to intrust it all to the schools. Lay it, if you will, to a growing lack of parental authority, to the excessive demands made by our modern commercial and social life upon the heads of the family, or to the passing away of those good old Puritan customs, such as morning and evening prayers; whatever the cause, the fact remains, and the school is becoming more and more *in loco parentis* both as regards the soul and the mind of its pupils.

Thus, from far and near, the cry is being raised to make the school a greater safeguard of the nation's virtue, to increase its efficiency as an agency for moral training and the development of character, and to our joy we find that the appeal is meeting with noble response both in our own and foreign countries.

From such great leaders as President Stanley Hall, Professor John Dewey, Dr. Felix Adler, Professor Michael Sadler, and a score of others who might be mentioned, there have come volumes and essays and inspiring addresses bearing upon this topic. Various governments have appointed special commissions to deal with the problem in its more complicated forms, and in two or three of the European countries the fate of national parties has been largely determined by their attitude toward this all-important question.

The measures adopted by different educational authorities to attain the high aim we have under consideration have varied almost beyond number, but with every passing year there has come a clearer understanding of the numerous factors which enter into the problem, and we may confidently predict that its correct solution in accordance with the peculiar needs of each individual nation, will not long be delayed.

It was my privilege to have some part in a recent international investigation which served to show the methods used or approved by a majority of the educational authorities of Europe, and I venture to present here a brief summary of certain portions of that inquiry.

In regard to the much debated question as to the ethical value of different studies, it was found that a vast majority of the teachers in the preparatory schools were inclined to believe "that there is ethical value in all

school work which calls for concentration and effort—'the blessedness of drudgery,' doing to the best of one's ability 'whatever the hand findeth to do,' but that history and literature (including Bible lessons) lent themselves more especially to moral instruction." As a whole, they were "strongly opposed to systematic moral instruction according to syllabus, as being too much in the air." They urged that the end to be kept in mind is not stocking of the "brain with moral tags, but the formation of moral habits, and habits can only be formed by getting the will to assert itself in action."

Speaking from personal investigation, carried on in many schools thruout Great Britain, I can say that no teacher in my hearing ever spoke slightingly of the Bible lessons, but, on the contrary, all were unanimous in praising their ethical value, testifying to the satisfaction which they found in teaching this subject.

In one of the largest cities of Scotland, a Roman Catholic priest, who was a member of the school board, expressed to me his most hearty approval of these Bible lessons, saying they were the only religious and moral instruction which many of the children of his own denomination received, so careless were their parents, but, he added, that he would be glad to have the Westminster Catechism dropped from the school curriculum.

Another investigator reporting on elementary schools in England stated that it was the unanimous opinion of the teachers, that the "root of all morality lies in religion, and that to divorce the one from the other is impossible."

In the opinion of nearly all, the secularization of the schools would be a menace to the national life. One head mistress has recently published "a suggestive scheme in which moral teaching based on religion is woven into every fiber of the curriculum." This report goes on to say that

> it is the atmosphere of their schools, the influence of their own personalities, the children's strong instinct of imitation and keen desire to please upon which most teachers rely in early moral training, tho they also welcome openings for giving more direct teaching as the moral sense of the children gradually develops.

Take it as a whole, however, there is a strong opposition to what may be called the French system of direct moral instruction, one of the leading masters of Great Britain calling it not only "useless" but "really pernicious." He says:

> One of the principal moral faults that a teacher has to fight, and one which is fostered by the class system, is the want of truth. By this I mean not merely lying, but use of the teacher's ideas as the boy's own. He says not what he thinks, but what he thinks the teacher would like him to say, and the average teacher is blinded into thinking that the boy actually feels what he says. There is thus a double evil, and at the close of a moral lesson, one can well imagine the boy's answers, which, having the appearance of moral progress, are only the result of mental effort on the part of the boy.

My own investigation in the schools of France led me to feel that systematic moral instruction was fairly well done, and productive of good results. I saw classes taught in this subject from the primary grades to

those in the *lycée*, and certainly there was no lack of interest on the part of either teacher or scholar. Indeed, most of the teachers in the public schools felt, as one expressed himself to me, "that the church is lost to the state and that the future welfare of the nation depends on the moral training afforded by the public schools." For them, this kind of training centers largely on moral instruction, and they, therefore, teach this subject with nothing less than religious zeal.

It is only fair to add, however, that one of the English investigators who later followed in my footsteps, reported thus:

> It may be objected to all these lessons that on the one hand they are in danger of producing moral priggishness, or even hypocrisy as serious as the religious hypocrisy of former days, and that on the other hand the attempt to analyze motives and to examine into hypothetical exceptions to the general rules laid down may produce a mental attitude not far removed from that of a pupil of a seventeenth-century casuist.

In my judgment, this whole matter has been well summed up by still another who had a part in this same inquiry:

> It would seem, then, as a result of this examination of the French system, that direct moral instruction appealing through the intellect, is unable to stand alone or to take the place of moral training. But, where moral atmosphere can be produced, direct instruction would then be useful in defining, strengthening, and controlling the impression made, and in helping the mental outlook.

As a result of our investigation in Germany, it was found that the teachers, with few exceptions, do not favor separate moral instruction. They contend that

> any attempt to teach morality in special lessons will defeat its purpose; that morality cannot be taught; and that the aim of influencing children ethically can be achieved much better through the whole spirit of the school, and through ethical teaching in connection with the various subjects.

It will, of course, be remembered that in all the schools of Germany religious lessons are given on a denominational basis, and that great importance is attached to this special instruction.

Religious lessons are given in most of the schools of Switzerland, but systematic moral instruction in only the primary departments. There seems to be a strong indisposition on the part of the teachers to introduce systematic moral instruction in the higher grades.

> One experienced teacher urged that moral teaching must be the natural outflow of the teacher's personality. Very careful selection of the school staff seemed to him the vital point.

For lack of time, however, I must turn from foreign shores, and give you a brief summary of another inquiry in which I had a somewhat larger part, and which was carried on much nearer home. It is of interest to note, however, that one of the immediate results of this European investigation was the gathering in London, of the first International Moral Educational Congress, with official delegates from almost every civilized country on the globe.

For some time past, a committee of the National Council of this Association has been at work prosecuting an inquiry on lines similar to those which were followed in Europe, and speaking on behalf of this committee, I want to express our sense of gratitude at the generous assistance which has been extended by teachers, principals, and superintendents of public schools covering a territory from the Atlantic to the Pacific and from the Lakes to the Gulf. Not less than one thousand schools have been brought within the scope of this investigation.

In reply to the question as to the comparative ethical value of different school studies, 58 per cent give the first place to the group comprising history and literature, history being somewhat the favorite. As an example of the testimony in respect to these studies, I would quote the following:

1. "Perhaps the best discipline for strengthening moral motives within the minds and character of developing children is the study of history, at least it can be made such. There is no subject better adapted to the ethical aim and none so valuable in adding interest and life to the merely formal labors in reading, spelling, and grammar. Factors making for the development of character in young children are the dramatic, picturesque, personal, heroic. While much depends upon the manner of presentation, yet, if all other things are equal, history should have the greatest ethical value among the school studies."

2. "No other study in the elementary school compares in ethical value to the study of literature, because human duty, right character and conduct are therein presented with greater detail and analysis than even conduct in the concrete presents. By means of reading, dramatization, memorization, conversation, and the drama, high standards of right in conduct and aims are worked into ideals of life."

Twenty per cent of the teachers considered that the ethical value of studies differed so slightly and that the method of teaching was so all important that they refused to make any special selection. As examples of this position, I quote the following:

1. "All exact knowledge and thorough study has in itself a moral value and a moral effect on the student. I deem it important, therefore, that all study should be conducted with accuracy and thoroughness to get the best moral results. Loose, slipshod work has an immoral effect on the student. I would, therefore, urge that we seek the best moral results in all our schools directly in line of each day's work, and of each pupil's studies."

2. "The value of studies varies with individuals and the preference should, I think, be given in any instance to that study in which the individuality of the student counts most. That study is best for any pupil, morally considered, which quickens most his intellectual interest and inspires him to put forth his most earnest effort in the direction of worthy objects to the exclusion of indolence, dissipation of energy, or indulgence in frivolity."

3. "The ethical value of a school study is the moral force of the teacher presenting the subject. The subjects usually referred to as ethical, history and literature, are frequently of less apparent ethical value to a class than scientific or mathematical subjects presented by a teacher of sincerity and moral earnestness."

4. "The ethical results of school subjects depend as much, if not more, upon the method of handling them, as they do upon the subject-matter. Of course, each subject has its own method in so far as it determines the way the learner's mind must move.

Two third-grade teachers in arithmetic, using same text in the same school, all conditions and circumstances similar, save the one of different teachers, got quite different results, not only in arithmetic, but in character.

"A	B
Completed assignment in 16 weeks	35 weeks
Neat in board work	Careless
Systematic on paper	Problems scattered over paper
Accurate in processes	Less accurate
Rapid in processes	Slower
Enjoyed the work	Indifferent
Wanted to show what they could do	Indifferent
Ashamed of mistakes	Took it as a matter of course
Conscious of power and self-control	Conscious of inability

"These same differences appeared in all work. I have illustrated by arithmetic because it is easier to measure the objective results. These differences in ethical results are due chiefly to the teaching power of the two women."

A small percentage spoke strongly in favor of manual in combination with mental work. As, for instance:

Without doubt the highest ethical value lies in those subjects combining mental and manual effort—moral training—drawing—domestic art and science—laboratory work—business training, etc. I am of the opinion that much of the ethical value of such subjects lies in the fact that they bring the teacher and pupil into closer personal relations because of their demand for individual help.

In reply to the question as to how far, under existing conditions, systematic moral instruction and training were given, 21 per cent denied that anything systematic along this line was being done. Sixty per cent affirmed that the work was insignificant and perfunctory, while 19 per cent were willing to consider it as fair. There were absolutely none who felt satisfied with present conditions along these lines.

As an example of the testimony received concerning the general work of moral training, I quote as follows:

Systematic moral training is given in nearly every public school worthy the name, and the emphasis is placed on punctuality, industry, truthfulness, total abstinence from alcohol and tobacco. In some 50 per cent of the schools or more, some attention is given to personal cleanliness, kindness to others, and kindness to animals.

In regard to the instruction received thru religious exercise, an example of the testimony received is as follows:

Such instruction is received only through opening exercises held three mornings of the week. The time used is fifteen minutes, sometimes more. The exercises comprise the presentation of moral and religious questions thru readings from the Bible and other religious and ethical works, and brief talks growing out of the life and concrete needs of the school. An attempt is made to unify and solidify the feeling of the school over questions of right and wrong in manners and morals, with fair success. We close with a hymn. We believe those exercises to be of very great value; and, therefore, they have been continued with the growing power that comes from reverent tradition for thirty years.

Concerning systematic moral instruction at present carried on, I quote as follows:

1. "The lower grades of the elementary schools have definite daily instruction given in conduct and morals, the lessons being based upon the stories and fables told or read to the children and upon concrete example found in everyday life."

2. "One period per week (half-hour) should be set aside for lessons on conduct. The thoughts of the child should early be directed to ideas of the proper conduct of life. He should learn the word duty, have his sense of moral obligation aroused. The aim is not intellectual knowledge of some ethical system, but rather that the children should gain appreciation and admiration of great and noble actions and should conceive a disapproval and dislike for what is morally wrong or low. The essential ethical element of a story (the story is suggested) 'is developed through questions which appeal to the moral sentiment and judgment of the child and impress the idea that doing right regardless of the personal comfort or advantage is a duty and the measure of human worth.'

"Conduct is divided into 'Duties toward self and duties toward others' with several subtopics.

"'Helps and Hindrances' are named. The work is carried on during the special period, chiefly through special reading lessons which are assigned with the ethical element suggested."

A question which elicited lengthy and interested responses was as follows:

Do you think that, in addition to the influence exerted on the pupils by the tone of the school, by the organization of its work and play, and by the personality of the teachers, more should be done to provide systematic moral instruction and training as part of education? If so, should it be (*a*) tho systematic in plan, almost entirely indirect in method, e.g., given thru the teaching of literature and history; or (*b*) arranged as part of the religious exercise of the school; or (*c*) planned in the form of regular lessons making a graded course of moral instruction on non-theological lines; or is some combination of these methods the more efficacious?

Forty-seven per cent of those who replied considered that the personality of the teacher and the tone of the school were together so important in providing moral instruction and training that, at most, there would only be required in addition some indirect method of moral instruction. I quote the following opinions on the subject:

1. "The personality of the teacher is paramount in instilling moral tone into her pupils. Her influence, her organization and administration of her school leave a marked impression."

2. "It is emphatically true, with respect to the earlier years of school life, that everything depends upon the personality of the teacher; in innumerable ways that can never be reduced to formal statements, the teacher may impart to the eager minds of children impressions as to their family, social—in a word—their moral relations, which never will be effaced. Whether this intuitive instruction will take place or not, depends entirely upon the teacher. It cannot be brought about by any system of formal preparation or decided by any examinations."

3. "Most emphatically and unreservedly, I must say that the ethical and moral training of public-school pupils should be imparted altogether indirectly through:

1) "The tone of the school.

2) "The organization of its work and play.

3) "The personality of the teacher, who should stand for everything that is true, honest, just, pure, lovely, and of good report."

4. "In catching fish, bait is as important as the hook."

5. "Personally it seems to me that the best moral instruction is given when it is least obtrusive. Pupils begin to regard ethics systematically taught as part of their school curriculum as something artificial, something good enough for the classroom and for discussions with the teacher, but entirely unnecessary on the playground or in after life."

Only 13 per cent spoke in favor of a religious exercise. As an example, other than that quoted under another heading, I might give the following:

The lack of reverence is a crying evil of the day. It seems to me highly proper that there should be some recognition of a Supreme Being in our schools. Even Congress is opened with prayer, and I see nothing inconsistent with public-school methods in having the day sessions opened with prayer.

Only 18 per cent came out strongly in favor of a graded course of moral instruction on non-theological lines. As examples:

1. "I must think that some form of regular lessons in a graded course of moral instruction on non-theological lines would be valuable, provided the teacher is perfectly in sympathy with the children and interested in her subject."

2. "As a result of experience and observation, both as an individual teacher and also as principal of a city high school, I am convinced that systematic moral instruction and training should be made a part of education in the public schools.

"This work should be direct as well as indirect. It should include rational, non-sectarian religious exercises, the relation of incidents from life, the discussion of wholesome literary and historical themes, and also definite, formal, positive, direct teaching of those precepts and practices and cultivation of those sentiments and emotions that tend toward the refinement of character and the elevation of manhood."

It might be of interest to quote here one of the numerous statements in opposition to religious education, as for instance:

Religious exercises, even if non-sectarian, should not be conducted in the public schools at any time or season. The danger is near that non-sectarian instruction will become at all times distinctly sectarian. Even by the indirect method of moral instruction through reading, stories, literature, music, art, history, and geography, the teacher is apt to impart this or that religious notion peculiar to her belief.

In opposition to systematic moral instruction, I quote the following:

1. "Regular lessons in a graded course would be productive of much more harm than good. I do not believe moral or religious growth can be arranged on schedule. It must be clinched when the occasion is ripe for it. A child should have systematic religious instruction, but the public schools cannot give it."

2. "A graded course of moral instruction would gradually be given by most teachers in a perfunctory way and thus fail in the very object to be accomplished."

There were 16 per cent of the replies in favor of combining all of the methods mentioned, viz., the indirect, the systematic and direct, and the religious exercise.

A very small number, hardly a fraction of a per cent, favored a scheme of denominational instruction, as for instance:

1. "Give a period each week to the different religious denominations to give direct dogmatic religious instruction."

2. "Let the state and churches unite in an effort to hold 'services' or 'meetings' in other places than the school building. This might require a readjustment of the time

for the opening of the daily sessions of the schools; it would also require more 'open churches' but such a compromise would not be doing even a 'little wrong' to do a great right."

Replying to the question as to how far the schools succeeded in cultivating a sense of civic responsibility and of duty to the state, 52 per cent considered that the schools were fairly successful, while 48 per cent felt that the results were far from satisfactory. As examples of these positions, take the following:

1. "As civic pride is the basis of civic duty, I had my teachers, by familiar talks, call the attention of their pupils to the places and buildings made sacred by the struggle for liberty, and to have their pupils visit these buildings and write occasional essays upon the events with which these buildings were associated. Much interest was aroused in this respect as Philadelphia is especially rich in historic associations."

2. "Teachers were instructed to require their pupils to commit and recite passages of prose and poetry, containing the expression of patriotic sentiments. A list of such extracts was appended to the course of study in civil government, many of them classic in thought and judgment.

"In 1893 I introduced the observance of Flag Day into the public schools, which attracted such wide attention that the custom has spread from city to city and from state to state until it has now become well-nigh universal.

"I also introduced the observance of the anniversary of the landing of William Penn which is now an annual custom."

3. "I fear we have not had much success in cultivating civic responsibility. In my own school I try always to make the children feel the power of their togetherness, to feel a loyalty to the school, and we use all memorial days—by whatever name—to arouse and deepen love of country. I feel strongly that it is a mistake to have the flag floating all the time. The children carelessly do not see it, and have no feeling about it. It seems to me better to float it on occasions and recognize it each time."

4. "I think, under careful guidance, that civic responsibility and duty to the state can be taught by making the school a community itself, and by emphasizing the duty of each one of the pupils in this community. Then, when they get into the world, they will see in the life about them something which their school life has fitted them to take part in."

Replying to the question: "What success has attended efforts to interest the elder pupils in social or charitable work?" 60 per cent reported that little or nothing had been done along this line, while 40 per cent told of various kinds of effort that seemed successful.

In regard to hindrances to the work of the schools in the formation of character, there was a surprising unanimity of expression as to the failure of the home to fulfill its obligations along this line. Ninety-six per cent reported as finding difficulty in the development of character by reason of improper home training. As for instance:

1. "We find it a constant struggle in our school work to inculcate feelings of obedience to parents and yet at the same time to help children to rise above a condition of home life and social environment which is most deplorable."

2. "A large percentage of moral failures in school results from bad home influences found alike in the homes of the rich, the poor, and the well-to-do."

3. "The conditions of home life, especially for the pupils who are brought up in wealthy surroundings, are most unfortunate for the development of the young people of

today. Too much is done for our young people if they are to develop a proper sense of responsibility to the community life and a self-reliant spirit—a spirit of initiative."

4. "The conditions of home life and social environment hinder much of the work of the school in the formation of character. The homes of the lower tier, where drunkenness, profanity, licentiousness, vice of every kind is common, where starvation and neglect are not infrequent; such homes are acting in opposition to every good work of the school. But on the other hand, the homes of the well-to-do and the refined are not all the very best for the formation of noble and strong characters. There is too much of the namby-pamby discipline in such homes. The children act at their own pleasure, and place themselves on the same level as their parents. They have their clubs, their social affairs, their dances: they woo sweet pleasure when they ought to be in dreamland."

Even the 4 per cent who seemed to be fairly well satisfied, could not always speak without some qualifications, as for instance:

The conditions of home life in this school are as a rule helpful. The patrons are home owners of the middle class. There is one exception: abnormal attendance at cheap theaters.

The replies indicate that all of the teachers are keenly alive to the effect of physical conditions in reference to the formation of character, and some excellent reports were received as to the work being done along this line; as for instance:

1. "For four months of the present school year we had medical inspection, altho we called it sanitary inspection, by a thoroly trained nurse. This inspection accomplished great good in securing the co-operation of parents toward improving sight and hearing by various operations. It also decreased contagious diseases; in every way contributed much toward the warding-off of diseases and providing better sanitary conditions. To show the character of the work done under sanitary inspection the following is the report submitted for the month of September. (Our total enrollment is about 6,000.)

"REPORT OF SANITARY INSPECTOR OF SCHOOLS FOR THE MONTH OF SEPTEMBER, 1907

Defects of vision	49
Acute trachoma	1
Conjunctivitis	1
Blepharitis	2
Adenoids	15
Chronic bronchitis	1
Tuberculosis	2
Suppurating ears	2
Typhoid fever	1
Scarlet fever	1
Pediculosis	17
Eczema	7
Cold sores	1
Pruritus	1
Impetigo	11
Imperfect hearing	7
Skin cases without diagnosis	10
Mentally deficient, and application made to the School for the Feeble-Minded	1
Recommended for transfer to the School for the Deaf	1
Number of pupils recommended for treatment	194
Number of pupils treated	129"

2. A superintendent reports: "In several schools I have found that nearly every habitual truant had some physical defect."

Asked concerning the size of classes and consequent lack of individual teaching, 90 per cent of the replies indicated dissatisfaction with the size of the classes, and the amount of clerical work required of the teachers. As, for instance:

1. "This is a serious drawback. We have attempted to reduce its pernicious effects by decreasing the amount of class instruction and increasing the amount of individual instruction."

2. "Unless some organization (such as the Parents' Association) is formed between the home and the school, it is impossible for the teachers to keep any hold of former or even of present pupils. Too much technical and clerical work required of teachers of today. Too much centralization of management."

3. "Over-pressure of clerical and routine work on principals and teachers shuts out the opportunity to follow up the influence gained in the classroom by continuance of interest and friendship. It seems sometimes as though the days were spent in 'paying tithes of mint and anise and cummin and omitting the weightier matters of the law,' judgment, mercy, and faith."

4. "Either time should be given to teachers, or special agencies formed to keep up connection between schools and parents."

5. "A clerk should be employed in each large building. My experience is that if I keep my clerical work up I must neglect visiting my pupils."

Less than 10 per cent signified anything like satisfaction concerning the matter.

The question was asked whether it would strengthen the moral influence of the school to give more responsibility to the elder pupils in the maintenance of discipline, and to this question 65 per cent answered in the affirmative and 35 per cent in the negative.

With almost no exception there was an expression of earnest desire to beautify the school surroundings and to emphasize in every possible way recreation and school games.

As to the value of formal addresses to pupils by teachers and others, 81 per cent were in favor of this method of inspiring higher ideals, and 19 per cent were opposed.

Asked as to what encouragement should be given parents to take a personal interest in the school, with a view to closer relations between the school and home, 83 per cent expressed themselves strongly in favor of parental associations or some such organizations, while 17 per cent doubted their value, or told of unfortunate experiences in connection with them.

There was no opposition on the part of anyone to the organization of school journeys, visits to places of educational interest, vacation schools, and holiday camps, when these undertakings could be successfully carried out.

Regarding the organization of old scholars' clubs, alumni associations, and the like, 75 per cent spoke in their favor, and 25 per cent felt that they

were not productive of much good, or else were beyond the range of possibility for the ordinary teacher.

The following question was not generally answered, but seemed to be considered important by a number:

Should steps be taken to make the continuation classes and night schools more effective in their training for citizenship?

In regard to this I quote as follows:

Such courses would not only fit them better for the work they are to do, thus enabling them to earn better wages and to raise the standard of life, but it would also be a benefit to the community as they would have a greater earning capacity. In a moral way it would be of benefit, because it would take these young people away from the streets in the evenings where they learn all kinds of evil and get into lazy and vicious habits, which hurt them all their lives. I believe our present laws should be so amended as to require pupils who leave school before the age of sixteen to take a certain amount of evening work each week up to the age of sixteen in public or private schools.

As we sum up these reports, taking into our range of vision the schools of this and foreign countries, we note certain facts which stand out boldly and are full of significance.

First. The deep interest which teachers the world over are taking in the problem of moral training thru the agency of the public school.

Second. The almost universal opinion that the strongest influence in the development of character is to be found in the personality of the teacher.

Third. The agreement on the part of the large majority that every study and every school duty, including the organization of the student body, should be effective in the work of moral training.

Fourth. The hesitation and distrust shown toward systematic moral instruction, based upon a syllabus, wherever this plan has not been tried. (This applies to the greater part of the schools.) On the other hand, the universally favorable attitude of those teachers who have had experience in this method of instruction.

Fifth. The general agreement that direct moral instruction, if it be timely and wise, is of great ethical value.

Sixth. The high regard shown for Bible lessons and religious exercises by those who make use of them, and the intense opposition expressed by those who are unaccustomed to their use.

Seventh. As a corollary of the preceding, the marked tendency on the part of all teachers to be conservative; to believe in their own methods and to doubt the value of anything different.

Eighth. The general condemnation of our American home life as a hindrance to the teacher in the development of student character.

What, then, should be our conclusion of the whole matter? This, perhaps:

The all-important and far-reaching problem of moral education demands for its wise solution an awakened church, inspiring with religious ideals the souls of its youth; unselfish homes, consecrated to their God-given mission of caring for the children; and last, but not least, the ever-present public school, whose corporate life, courses of study, student organizations, and physical surroundings shall each and all

play their silent tho well-planned part in the development of character, and whose teaching force, with minds open to conviction, shall serve in love, in justice, in faith in things unseen, in reverent devotion to their high calling, and in conscious recognition of the tremendous power for moral training which is ever active thru the personality of the teacher.

DISCUSSION

Miss N. Cropsey, assistant superintendent of schools, Indianapolis, Ind.—All who have seen the mural decorations in the Library of Congress at Washington must have been impressed with the artist's conception of man's progress, and the remarkable expression of it by Labor, Religion, and The Book. Here we have the method of education placed before us by an artist's skill in seizing the essential things to be considered in a long and complex process.

Manual labor, for a purpose, is a necessary means of growth in the early stages of development, intellectual and moral.

Religion is the spirit of reverence for that which is above us and around us: it should teach the child the spirit in which labor is to be performed. In public schools, religion cannot be taught by the study of a creed, but must be the result of an effort to produce a religious attitude of mind. All the constructive habits of life formed in a good school community (habits of obedience, industry, and honesty), the personal influence of the teacher, the story of the "way of life" thru art and literature, including such portions of the Bible as are of universal significance, are essentials in the process of moral and religious development. In The Book we have "the revelation of man to men," on the plane of practical wisdom and also on the plane of spiritual insight.

Children in the primary and elementary schools are dependent upon the individual leader and guide in the person of the teacher and the parent for the adaptation of this curriculum to their needs.

The conditions for moral development have not been provided in these schools, because the number of pupils under the charge of one teacher makes individual knowledge of the pupil, and individual guidance, an impossibility.

The greatest advance that could be made at this time in elementary and primary education would be to make the numbers such that each child could be regarded as an individual. Moral development means the development of personality.

Remarkable work has been done in all these schools to advance moral standards and to form habits of good behavior, but the task of moral education assigned to us is too great for accomplishment under present conditions. The inadequate provision for real education makes the necessity for supplementary schools of various kinds; mostly reformatory in their character.

The word "moral" is a very large word, very inclusive, very comprehensive. We are accustomed to define moral development as that process by which the individual adjusts his conduct to the ideals of the community; this is true and well said. Tho it may seem to be a simple process, it is very complex, for even an outward conformity to custom requires some inner adjustment on the part of the individual: and complete harmony with the highest ideals of civilization means such an experience as results in free moral action.

When we are so far advanced in knowledge and insight as to see the connection of this elementary education with all after success or failure, we shall consider a large expenditure of time and effort and money a most economical investment.

JOHN W. COOK, president, Northern Illinois State Normal School, DeKalb, Ill.—Mr. President, it is a far cry from the children in the schools to the men and women who are responsible for the management of the social institutions of our modern civilization, yet what we have to say to the latter must be said to the former, and we must content ourselves with the hope that it will reach its ultimate goal. There will be much to interfere with it and to warp it quite beyond recognition, perhaps, but it is the best that we can do.

Moral conduct is determined in at least two ways: by the formation of what may be called moral habits, and by inducing moral judgments. The school offers opportunity to promote the former thru its own routine and the latter thru that personal contact of teacher and pupil which must always be the main reliance of the school in accomplishing that end.

The teacher should have the keenest sensitiveness to moral situations and should always be on the lookout for a moral content in all of the school life of the child. He should note and tabulate mentally or otherwise the disposition to observe scrupulously the school virtues of punctuality, silence, industry, cleanliness, and all of the rest of those qualities of conduct that we call moral because they make for the best conditions in our common life.

But especially should the teacher cultivate such a moral consciousness in the child as will respond in the estimation of possible lines of conduct from the standpoint of the good. It is easy to conceive of a child whose external deeds might conform to a high standard, and yet in whom there might be a substantial absence of moral judgments. There should be real deliberation in the presence of a genuine conduct problem, and I do not see how such a disposition can be secured as a permanent mental attitude without frequent discussions of matters that actually arise and that should be passed upon by the school. The final determinations of the moral life will mainly rest upon moral habits whose meaning becomes apparent and whose significance becomes luminous thru moral judgments.

WM. H. BLACK, president, Missouri Valley College, Marshall, Mo.—There is a vast difference between ethics and morals, as there is a difference between the spirit of the Greek peoples and the formality and imitativeness of the Roman peoples. Ethics is a matter of character. Morals is a matter of conventionality.

The thing to be aimed at when we talk about moral education is really ethical education, that is, morality robbed of its Roman meaning and filled with modern life and religion. There is plenty of conventionality, mere observance of rule, external conformance to precept in our state prisons where the lock step is the perfection of order. It is also found in the military training of the soldier whose life is a life of order regardless of character. What we want in our education is not its formal conformity to precept but the vital principle in the soul, genuine character.

From the earliest days, teachers' institutes and leading educators have been insisting that character is the chief end of education, but character is not so much what a man does as what he is. Now the National Education Association is composed mainly of people who believe in the Bible and in the church and in the Christian religion. None of us as Christians would think of a character as good apart from regeneration or the New Birth. All our Christian teaching, whether Catholic or Protestant or Jewish, insists on the importance of the divinely created clean heart, and the divinely renewed right spirit within.

If our education is to attain its real end of character formation, then the things which really are fundamental in character must be insisted on.

These are three:

First. A belief in God to whom all are responsible and who is active in the government of the world.

Second. The immortality of the soul; that this life does not end all, and that in that future toward which we haste everyone must give an account of himself, and of his deeds.

Third. That the one textbook of these great principles is the Bible. I do not see the possibility of character formation apart from these great facts. They are the teacher's materials for the building of character. Without them, the teacher can conventionalize, but he cannot produce character.

D. B. JOHNSON, president, Winthrop Normal and Industrial College, Rock Hill, S.C.—I believe the world is getting better, not worse. This great movement for moral education in the schools, with other great philanthropic movements of the day, is both an evidence and a result of the world's moral growth.

There are yet those who insist that moral and religious training should be left to the home and the church; that the schools have all they can do properly to teach the three R's—to attend to the intellectual development of their pupils; that there are too many "frills" and "fads" now in the schools to think of adding another on "moral training." But the home and the church do not seem to be able to do this work alone—the home often is not dominated by right ideals, is not equipped for moral training, and the church reaches a very small proportion of the people.

The state must rest for its safety and stability upon the character of its citizens as well as upon their intelligence and skill, and hence the necessity for the state, for its own welfare, to make provision for moral training in the public schools as well as for intellectual and physical training—hence the duty of the state's schools to train for good citizenship. This seems to be the view now of the enlightened leaders of thought in all civilized countries.

The National Education Association has stood for it for some years. The strength and universality of the demand for moral education in the public schools is shown in many ways, but in no way more convincingly than in the International Moral Education Congress held in London in the fall of 1908.

It is pretty generally conceded now that all education must take account of the three H's, the head, the hand, and the heart, as well as the three R's. "The whole child goes to school" and the whole child must be ministered unto. Moral training is not another fad, nor will it add to the already overburdened curriculum. It can be given in the regular management and in the teaching of the regular studies to the great improvement in the management and the teaching. "Character is not something apart from knowledge and skill." Obedience, honesty, thoroness, truth, fairness, order, punctuality, perseverance, self-reliance, courtesy, self-control, courage, the spirit of service, love of the good, the beautiful, and the true should be the fruits of the management and instruction of every good school.

Some advocates of moral training in the schools contend that it should be given systematically in accordance with an outline or textbook or syllabus similar to the French system. Others, and the great majority, hold that it should be given indirectly and incidentally—that more harm than good results from a didactic teaching of morals. The injunction "Be good" does not accomplish much by itself. Children get more from what they overhear than from what they hear. The story of George Washington and the cherry tree, tho perhaps a myth, has done more to secure truthfulness in children than all the admonitions to be truthful. Precept and example must go together, however.

After all is said and done the most important agency for securing moral training in the public schools is the personality of the high-minded, devoted teacher. Actions speak louder than words to everybody, but especially to children. Gladstone has well said, "One example is worth a thousand arguments."

To secure moral training for the schools we must secure teachers of the highest character for them. In selecting teachers we must consider first character, then teaching

ability, and then scholarship. We must see to it that our best men and women teach, and, to this end, that the social position and rewards for the teacher are equal, to say the least, to those of other callings and professions. The normal schools must train and inspire their students for moral training. It was once said of our greatest Teacher that "The Word was made flesh and dwelt among us."

As a result of the great awakening in this country to the vital importance of moral training for our children in the public schools, I look forward confidently to a prouder and more glorious celebration of that proud and glorious day, the anniversary of the birth of this great republic.

John R. Kirk, president, State Normal School, Kirksville, Mo.—Children in the fourth grade make some generalizations; those in the eighth grade, more generalizations; those in the high school, still more. Some college men feed their students largely on predigested generalizations. Even committees of this Council would fill us with platitudinous generalizations, while we long for something better.

But some of us live more largely among concrete realities. We see that the best moral education is in the kindergarten. The best conduct is there. Kindergarten children are taught to be on their best behavior; to have the best thoughts; to do the best deeds; to aspire to the noblest ways of living and acting. It is example, precept, conduct, permanent purpose, habit.

My friend, President Black, suggests re-generation, but my plea is for the avoidance of de-generation. The advanced grammar grades are marked by much relaxation from the moral standards of the kindergarten and primary grades. In the high school those earlier moral standards come to be deemed unworthy if not ridiculous. Frolicsome high-school girls regard the cautions and injunctions of their mothers superfluous. Slim-legged high-school boys, with rolled up trousers and spreading coat tails, vehemently declare their creeds of freedom from discipline.

During the fall and spring of the year we meet numerous self-directed crowds of high-school boys on railway trains and in hotels as they are crossing over from school to school in order to participate in their various interscholastic contests. These roving groups of heedless and irresponsible persons are often loud and boisterous. Quite commonly they smoke and swagger and secure much public notice. Just when the waves of adolescent storm run highest, school education unlooses the rudder and lets young life be swept by its own whims and fluctuations and by the relentless tide of events at large.

The higher we go in education, the more we see of relaxation from good moral standards and good conduct. Yesterday this Council heard with patience the president of a university expatiating upon the necessity for absolute freedom in and about a university. All moral standards, customs, creeds, and beliefs would seem to be so nearly of equal value that each individual around a university may be trusted to follow his own sweet will and pleasure. Each one in and about the campus may have his own standards and his own doctrines which he may publicly practice and inculcate. The university is the world boiled down. "It is cosmopolitan; it must be free!" This is what we are told. Hence the high-grade but necessarily narrow and sometimes bigoted specialist, quite out of touch with the world and out of sympathy with its activities, must be left free to teach and to do what he will. Almost any poorly taught, swelling youngster choosing to call himself a university student must be tolerated in all his eccentricities. The neglected and self-inflated Sophomore becomes the ideal for the incoming Freshmen; and the Freshman for the high-school boys who look to him when seeking an ideal. But the high-school boy is the ideal for the grammar-grade boy; the latter in turn, for the primary-school boy. Each higher-grade boy is inclined to look upon a well-behaved lower-grade fellow as something of a "sissy."

It is high time that the Council of the National Education Association take this matter under serious consideration. I reiterate simple facts which most of you know

and all may learn. They are concrete facts; not platitudes and not pleasing generalizations. I believe the men "higher up" ought to come down among the realities and get busy trying to rectify their own creed and conduct.

JOHN MACDONALD, editor *Western School Journal*, Topeka, Kans.—There are three methods by which moral teaching may occur: absorption, direct teaching, or a combination of the two. The most effective teaching that the world has had was that given by the Great Teacher. He combined his personality with direct instruction. No teacher has personality enough to meet the requirements of the schoolroom. However good a teacher may be, his example should be supplemented by formal instruction.

THOMAS A. MOTT, superintendent of schools, Richmond, Ind.—This report is rich in truth and suggestions for all earnestly studying the subject. I heartily agree with the statements of fundamental principles, and in the main its suggestions are based on the highest philosophy of education. The essential element of true education for real efficiency is moral character. The principal categories of moral education are the ideas of duty, virtue, and conscience. Nothing in the realm of true education is of more absolute value than the development of the moral will. As Rosencranz says, "Will guided by the principle of right is seen by the inner self."

I wish to emphasize the potency of the true school in developing in the pupil the real *moral will*, the habits of basing his actions on the ideas of right and duty rather than those of expediency and desire. Character is not something apart from knowledge and skill, but is knowledge and skill guided by the moral will, directed by conscience. In the ideal school the highest virtues are those which are necessary for the moral citizen. In the true school every rule of management, every regulation, every method of procedure are such as to lead the pupil to right action, and to give him the habit of directing his own will along the lines of *duty* and *truth*.

In the teaching of the three R's, in the study of the humanities as well as the sciences, in the work of the gymnasium, laboratory, shop, and playground, there are the greatest opportunities for moral development.

The school virtues, industry, honesty, obedience, thoroness, truth, silence, order, fairness, punctuality, self-reliance, courtesy, self-control, courage, and the spirit of service to others, the love of the beautiful, the true, and the good, are the fruits of good management and true method. These are the virtues of good character and ideal citizenship. If the school is immoral in its tendencies, or the method of the school as a whole does not develop in the child the moral will, its method and spirit are wrong.

The method in school, the method in teaching each branch of study, should call out in the child motives of unselfishness and inspire in him highest effort based on a love of truth and the accomplishment of duty. The true method never seeks to have the pupil base his effort on motives of pride and rivalry, or the securing of high percentages. True method will insure better teaching of the subjects themselves and also develop in the pupils habits of moral action.

Success is not the highest moral end. Truth and duty should always stand first.

The beauty of the school grounds and buildings, the cleanliness and purity of surroundings and buildings themselves, the decoration of rooms and halls with examples or copies of the world's best art, will lead pupils to a high appreciation of and a love for the beautiful. The love of the beautiful and pure, next to the love of God, is the greatest safeguard in life from habits of sin and grossness.

The school whose æsthetic environment is the highest, will, all other things being equal, stand in the life of the children as a mighty force for high moral standards. The school environment marked by harmony in color and form, and the presence in the school of a few real works of art, tends always to a moral uplift, and takes no time from the graded program of the so-called "necessary" studies.

In the true school the most vital force for moral training will be the presence of a moral spirit and high ideals, accompanied by right methods and an enriched course of study.

JAMES W. CRABTREE, state superintendent of public instruction, Lincoln, Nebr.—No virtue ever has great strength except by practice. The school can render good service to the youth of the land by giving them greater opportunities for exercise in needed virtues. Most young people will profit greatly by self-examination. The school should encourage them in this practice.

MRS. L. K. BURKE, San Francisco, Cal.—We do not put enough responsibility upon the home. We allow the home and the community to shirk their duty in the matter of moral education. We need to become teachers of the people. Until we have the co-operation of the home and the community we cannot do all we should in the matter of teaching truthfulness, honesty, promptness, and obedience.

A. C. NELSON, state superintendent of public instruction, Salt Lake City, Utah.—There are three things that can be taught in the public schools: the Fatherhood of God, the Leadership of Jesus, and the Brotherhood of Man. The school is the best agency existing today for the proper teaching of these three ideas. When these most fundamental ideas are taught we will have gone a long way toward proper moral education.

J. F. MILLSPAUGH, president State Normal School, Los Angeles, Cal.—We have failed to produce the kind of results desired in moral education thru our inability to get self-activity in our pupils. When one does a thing because he must, he derives but little strength from it. We should try to make our pupils desire to do certain things because of the moral uplift that will come from them.

M. P. E. GROSZMANN, Plainfield, N.J.—It is a mistake to teach morals so that young people will become self-conscious prigs. It is also a mistake to assume that moral instruction is the same for all ages and stages of development. The teacher should hold up an idea and lead the pupil toward it. No teacher is able to be an example equal to the ideas he desires his pupils to follow. If the teacher is generous and fair in all his dealings, he will exert a wholesome influence.

CHARITY DYE, Indianapolis, Ind.—It is a significant thing that the dominant note of the twentieth-century education is immoral. The great increase in the number of young people at our correctional institutions proves that there is need of more direct teaching in morals. We need to teach ideas of conduct and citizenship. Biography may be made the center of direct moral teaching in the schools.

MRS. FANNIE FERN ANDREWS, secretary American School Peace League, Boston, Mass.—The Peace League is greatly interested in the teaching of morals in the public schools. It has prepared a series of pamphlets for the different grades dealing with the general subject of good-will. This plan includes a book designed for direct teaching in each grade.

FRANK A. FITZPATRICK, Boston, Mass.—I am not in accord with the notion that everything is retrograding. I am an optimist. I know that the young people of today are much better than were the young people when I was a boy. I know that the schools of today are greatly improved over the schools of my day. The school and the home by their example and practice produce passive morality. It is the inertia of these instructions that produce truthfulness, punctuality, responsibility, and honesty. Active morality is brought about by love of family, church, city, and nation.

GEORGE A. COE, Union Theological Seminary, New York, N.Y.—The general plan of moral instruction prepared by Secretary Carr has proven the report under discussion is

noteworthy because no mention of religion occurs in it. Religious instruction belongs to the church and the home. No part of it should be given by the school.

CREE T. WORK, Fort Morgan, Colo.—The English Bible, the best-known book of moral instruction, should be used in the schools. In the teaching of history, the pupils should be led to make definite moral conclusions. The need of truth and honesty in civic and state affairs should be taught with all the force necessary.

The following three addresses were submitted at the evening session of the National Council by members of The Religious Education Association, which society had been invited to join in discussion of the foregoing report:

VIRTUE AND THE VIRTUES: A STUDY OF METHOD IN THE TEACHING OF MORALS

GEORGE A. COE, PROFESSOR IN UNION THEOLOGICAL SEMINARY, NEW YORK, N.Y.

Altho my topic concerns the method of moral instruction and training rather than the philosophy of education, it may be well, for the sake of preventing misunderstanding, to state at the outset some of the assumptions that underlie the practical suggestions that I shall offer. I assume, for example, that moral character is altogether a matter of a man's relations to society. Religion thinks of society in a peculiarly broad way, making it include God and our dead, as well as all the living. Concerning religion our state schools are not permitted, and should not be permitted, to give instruction. This limitation must be rigidly maintained in the interest alike of religious liberty and of political equality. I do not desire any recognition of the religious basis of morals. What I hope for is a recognition that life, as far as it is truly successful, is social thru and thru. I put no stress whatever upon the desirability of an increased use of the Bible or of worship. We must rely first of all upon the right organization and conduct of the school, and upon the teacher's personality, but in addition we should have a definite, systematic, carefully graded scheme for leading pupils, in morals as in everything else, to see just what they are about. This means instruction in morals, but instruction in morals can have its proper effect upon character only when the ideas that are to be communicated develop in the pupil's mind as a phase of his own reaction to a concrete social situation. The problem that I propose to myself is, How can this unity of moral idea and moral reaction be effected in the school?

The reason why we have not made more rapid progress toward a satisfactory method is, in my opinion, that we have given inadequate scrutiny to the *content* of the proposed instruction. We have given too much attention to the virtues and too little to virtue. I question whether a satisfactory method can be had as long as the basis of the curriculum is a catalog of virtues.

The ancients, as well as the moderns, offer us lists of cardinal or essential virtues. "Prudence, courage, temperance, and justice" is a list that has come down to us all the way from Plato. But what are these cardinal virtues in the concrete? We know that a Sophist as well as a Socrates could lay claim to every one of them. Prudence requires nothing but sufficient wisdom to get what you are after, no matter what this is. So, too, one can have courage in executing any design, good or bad. Nor does temperance or self-control imply anything as to a man's central purpose. That even the concept of justice depends for its meaning upon an antecedent conception of humanity is shown by the fact that the greatest of the ancient philosophers regarded slavery as inherently in accord with human nature, and therefore just.

When we come to modern schedules intended as a basis for a curriculum of instruction in morals, we find certain inequalities that are not recognized in the schemes themselves. The chief part of these lists consists ordinarily of virtues like these: Industry, patience, obedience, courage, self-respect, perseverance, self-control, economy, amiability, contentment, comradeship, fidelity. How much is really implied in such terms? Is industry good *per se*, or does its goodness depend upon the end for which one works? Clearly patience is good only when it is the shortest way to a good end; otherwise impatience is better. Courage on behalf of a good cause is good; otherwise it is bad. Self-respect is good only to the extent that one is worthy of respect. Economy is good only that one's savings may be used for something worth while. Amiability must be of the kind that distinguishes between good and bad men before we can approve it. There are times when contentment is out of order; and there are conditions in which obedience only prolongs unjust authority, and creates a craven spirit in him who obeys. Even fidelity, as with the political trickster who always "stands by his friends," may imply evasion of the larger good. In short, all these virtues can exist, either singly or in combination, in a character that every one of us would call bad.

Certain of the virtues that appear in these lists, however, are less ambiguous. Thus kindness, unselfishness, helpfulness, and truthfulness point with a fair degree of definiteness to a social end. When we come, finally, to love of parents, we have before us an end that is always unambiguously social. The difference between a virtue like love of parents and a virtue like perseverance lies in two things: Love of parents expresses a social purpose, and it indicates the persons toward whom it is directed, while perseverance does neither of these things.

Now, our first concern in the teaching of morals should be to secure genuine discrimination between social and unsocial ends or purposes, not between abstract or formal virtues. The question to be raised in the pupil's mind concerning an act or a course of action is not, Is it industrious, courageous, persevering? but, What persons does it affect, and how does it affect them?

The trouble with formal moral instruction *as it has been understood* lies deeper than most of its critics have realized. Times without number we have insisted that a pupil who understands the virtues may not practice them. Yes, but the incurably radical fault of such instruction is its lack of truth. For it has falsely assumed that a pupil who *does* practice the virtues of the schedule will attain to virtue. There are two reasons why this is untrue. The first is that most of the virtues in the catalog are abstract qualities of will, not concrete social purposes; they describe some of the conditions of an efficient will, but they leave out the social mark of a good will. The second reason is that moral character is represented as made up of a combination of qualities or virtues. Socrates declared truly that virtue is one and indivisible, not a collection of virtues. Now, the unity of a good character consists in holding to a social end or purpose thru a period of time, and making the details of conduct all contribute to this end.

It follows that the material for moral instruction is the functions of men and of institutions in society. Let us stop studying virtues, and study instead what actual men do, and why they do it. What does a policeman do, and why does he do it? What does the health commissioner do, and why does he do it? What does a judge, a lawyer, an alderman, a grocer, a hod-carrier, a mother, a father, a son, a daughter do, and why? What does a public library, an art museum, a newspaper, a nickel theater, a billboard, a railroad, a university do? Here is the material upon which children are actually forming their characters anyway, whether we will or no. It has always been so, and it always will be so. The lives with which the child is in contact constitute the primary material for his moral growth. All that the school can possibly do is to improve the use that he makes of it, partly by calling his attention to what would otherwise be overlooked; partly by extending, thru literature and history, the range of cases upon which he reacts; partly by reinforcing social incentives; partly by forming the school into a little society which carries on a directed experiment in living.

I am tempted to pause here to remark that the transformation of curriculum and method thus indicated is only a part of the reform that is sometimes called the "new education." The old scheme of merely general culture broke down because it taught processes but neglected functions. It insisted that a child must know arithmetic, but it never called his attention to the function of a grocer in society. It was punctilious of linguistic propriety, but it had nothing to say about the health of a community, how it is to be preserved, and who is responsible. It taught historical genealogies, but nothing concerning a favorable birth for the next generation of babies. Many years ago, when the first threshing machine appeared in a certain rural community, several boys were punished because their desire to see it work caused them to be tardy at school. So far was the old-fashioned

school from reality. Nor are we ourselves beyond the danger of perpetuating this separation. To teach qualities of character, but not the functions of men and women and children, is to perpetuate it.

Examples of what is now needed are not lacking in Superintendent Carr's proposals, especially for the first, second, and fourth high-school years. Here he bases moral instruction directly upon the structure and functions of a mercantile house, the family, the state. In a measure he employs the same method in his proposals for the kindergarten and the first four grades. Even such abstract heads as *helpfulness*, *kindness*, *sociability*, seem in several cases to cover the idea of function rather than quality. Yet the old wineskins are still in evidence under many of the captions.

In his proposals for grades five to eight, Mr. Carr seems to me less happy in his conception of material and method. White's "Character Lessons," which are here followed, tho they contain material which teachers can use, are constructed upon an inverted method. First come definitions or explanations of a virtue, then illustrations, and finally applications. What is this if not precisely the teaching *about* virtues that has brought formal moral instruction into disrepute? Let us begin a lesson in morals just as we begin one in nature-study, with a concrete case that is at least partly within the pupil's experience. Let the pupil be led to analyze it himself, and to make discovery for himself of the breadth or the narrowness, the social constructiveness or destructiveness, of the conduct involved in it. As for the application—well, we who are in the work of Sunday-school reform directed one of our first and fiercest attacks against the old way of making the application, that is, separating the "lesson" of the lesson from the lesson itself. An examination of the newly adopted graded lesson systems will show a decided improvement in this respect. Yet here we find a public school lesson on *Industry* that starts out with an explanation of what industry is, then gives examples of industrious merchants, manufacturers, inventors, and naturalists, and ends with an application, not to store-keeping, manufacturing, etc., but to school studies! Does anyone really believe that Willie Green of the fifth grade will study his lessons because John Wanamaker, Thomas A. Edison, and Luther Burbank work hard in their respective occupations? Willie is engaged with functions which to him are different from those of merchant, inventor, and naturalist. At some point in his course it will, perhaps, be worth while for him to study the career of Mr. Wanamaker in order to see what a merchant does for society and how he does it; Mr. Edison's career, to see what an inventor does for society and how he does it; and Mr. Burbank's career, to see how the breeds of plants and of animals can be improved, and why they should be improved; but if you wish to make eleven-year-old Willie Green enjoy hard study you must find your leverage in something that he can recognize as his own present good. A teacher who cannot teach arithmetic so that it

seems to Willie to be included in his very own job will scarcely induce mathematical zeal by telling how many hours a day Mr. Edison spends in his laboratory!

The first requirement for an effective system for teaching morals, then, is the frank abandonment of the virtues as the subject-matter of the curriculum, and the substitution therefor of the functions of men and women and children in society. The adoption thus of concrete material will open wide the way to a solution of three troublesome problems, namely, how to secure a truly developmental order of topics from grade to grade; how to awaken a sense of obligation within a scheme of free individual growth, and how to co-ordinate morals with the other subjects of the curriculum.

Curricula based upon "the virtues" are inherently incapable of obeying a geniunely developmental principle. If we have thirty or forty virtues to teach, with only eight grades in which to teach them, we must distribute the virtues pigeon-hole fashion, with only partial regard for the order of growth in the pupil's personality. We inevitably distribute the virtues thru the eight years in a serial order that is artificial. Mr. Carr has done about as well as anybody can do with such a scheme, yet his plan shows many misadjustments like these: *Obedience* is a second-grade subject only, tho the hardest struggle to obey comes later; *truthfulness* and *honesty* appear in the second and fifth grades only; *cheerfulness* appears nowhere above the third grade, and *justice* in the seventh only. Now, in the life of the child there is no such serial order of moral issues. Justice, cheerfulness, unselfishness, honesty, truthfulness are appropriate and needful at every stage of growth. The fact is that we have here two incommensurables, a set of abstract moral qualities and a growing child, with a repetition of the ancient fallacy of attempting to fit the child to the curriculum rather than the curriculum to the child.

That a way out of the difficulty can be found by building the curriculum upon the social functions of human beings appears from three considerations. *First*, these functions can be arranged in an ascending order of complexity, from washing our faces and saying "please," to managing a factory, or administering the laws of a nation. *Second*, the ascending order of complexity is substantially an ascending order of sociality. Not that family affection with which the child begins is ever to be outgrown, but that social feeling, motive, and purpose increase in both breadth and depth as social funtions radiate normally from the hearth to the larger and more complex organizations of men. *Third*, this ascending order of functions and motives coincides in general with the child's increasing contact with persons and institutions, and with his increasing assumption of responsibility.

The order of topics thus implied has as its first member the daily life of the household and what each member of it (father, mother, children, hired helpers) contributes to it. The concluding topics of the series will

concern social life in its widest aspects (the economic order, poverty, vice, crime, immigration, wealth, marriage and divorce, world peace, for example), with such analysis of causes and effects as to locate responsibilities. Between these two extremes will appear the persons who minister to the household from outside it (the butcher, the baker, the grocer, the milkman, the letter-carrier); then the persons and institutions that the child encounters when he begins to go to school and to execute errands for father and mother (the teacher, playmates, the street railroad, the fire department, the policeman); then the industries of the community, whether agricultural, manufacturing, or commercial; then the social institutions of the community (schools, libraries, churches, the local government); then the activities of the county, state, and federal government; then institutions like railroads, water and light companies, banks, newspapers, theaters; at last the specialized professional and technical occupations. Here is a genuinely progressive order that coincides substantially with the growth of the child's social experience from the kindergarten to the end of the high-school course. In addition, there will be woven into these topics the social aspects of health and disease, sexual hygiene, and preparation for marriage.

Let us see, now, whether this material is appropriate for awakening a sense of obligation within free individual growth. Under exceptional circumstances you may evoke effective moral emotions by sharply defining a virtue or a fault and adducing biographical examples of it. But the only generally valid method consists in causing the child to define to himself his own purpose in situations that he actually experiences. When I ask myself what I am really after and why, I compare and contrast one purpose with another, and inevitably I begin to estimate values and to approve and condemn. Now, the curriculum that I have sketched is based upon the changing social contacts and reactions of the pupil. Lead him to ask, What does a street railroad do for the community? and then, What do I do in this situation? and he will almost inevitably appreciate the obligation to pay his fare. A boy was throwing stones at a street lamp. A passer-by said, "Why do you wish to break your father's lamp?" "It isn't my father's lamp," replied the boy. "Who pays for street lamps, then?" was the rejoinder. A not less pointed example of the effect of defining one's purpose to one's self is this: Get a boy to tell you what he really wants in the next game of baseball that he plays, and you will draw out of him the right material for awakening indignation and scorn, admiration, and social purpose. I would have in the curriculum the subjects of doll play and other make-believe plays; marbles, tops, mumblety peg, and jackstones; tag, leap frog, and baseball; running races, tournaments, picnics—not as applications of principles brought from who-knows-where, but as living tissue of morals. Just so the entire series of the child's extending social contacts can be so used as to awaken intelligent approvals and condemnations, and analysis of one's own conduct.

Is it not evident, finally, that here is the solution of the problem of

co-ordinating moral instruction with other subjects? Many of our teachers, perhaps most, doubt the wisdom of a specific course on morals. It is likely, they think, to become abstract. Besides, is not every subject that is well taught a moral discipline? Does not arithmetic, because it requires accuracy, train to truthfulness? And so on. Now, it is true that everything in the school can be made serviceable to character. But it is easy to overestimate the value of merely formal discipline. With our lips we all profess that the pupil's interest and motive for study should be found in the thing studied. Yet the asserted moral value of mathematics resides not in the content, but in the way it is studied—in the mere form of the act, not the content of it. The assertion that such merely formal training in mathematics appreciably conduces to truthfulness is open to the gravest doubt. You lose most of the moral value of anything when you separate it from the functions in which it has its origin. Scoring a baseball game accurately or keeping an accurate expense account does train to truthfulness, however, because here form is not separated from content. Why, now, should teachers longer consent that arithmetic or any school subject whatever shall be abstracted from the social functions to which it belongs in real life? Why should the school not recognize that arithmetic is a phase of buying and selling, planting and harvesting, building a house, cooking, trimming a gown, even playing the games of boys and girls? Now, give us really vital material thruout the school, and the course in morals that I have outlined will not seem to be lugged in. It will deal with the primary phase of all the material of all the subjects; that is, with the co-operative purposes and functions of men in subduing nature and in enriching social existence. Language-study, number-study, earth science, history, literature—these exist at all because they minister to the ends of a rational will. Study of the ends of a rational will is the study of morals. Therefore the study of morals is not only not foreign to the other school studies, it is the most natural introduction to every one of them, and it alone can lend to them the complete concreteness that modern educational theory demands. Here, then, is the principle requisite for the co-ordination of morals with other subjects. The study of morals presents the material of education in its wholeness as human experience in a purposeful social life; the other studies have to do with parts or phases of this material.

MORAL TRAINING OF COLLEGE STUDENTS

DAVID STARR JORDAN, PRESIDENT OF LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

(Synopsis)

We have troubled ourselves a great deal because college students did not want what the college offers. Under the old curriculum some students found just what they wanted to receive—a high degree of culture thru the study of the classics.

When the great discoveries in science were made and the wonderful developments of this new field were organized into matter for study, the college curriculum was made into a sort of patchwork, samples of all knowledge were put into it, and it was assumed that the educated man was one who knew a little of everything. It was soon discovered that this plan had little value, because nothing could be done thoroly. The old classical curriculum was much better because it had continuity.

The next change in the curriculum was the introduction of the elective system. By this system it was the object to offer every student something that he desired, which operation had the effect of greatly increasing college attendance.

In the enlarged college new problems developed. Because of the new problems some colleges threatened to go back to the old fixed curriculum.

It is found that in large institutions about one-third of the students study because they like it; one-third study because they see some vocational end; one-third are in attendance because of the various affairs connected with the college, such as the social life, fraternities, and athletics. With this last third little can be done.

The college student should study some one thing long enough and deeply enough to master it. This special study subject should become the backbone of his intellectual equipment. He should have at all times in his college work competent and expert advice. No one is better able to give this advice than the professor in charge of the subject which is the student's specialty.

The moral problems of the college center around the third who do not come for any real purpose. Many of the faculty members do not care enough for the individual student. They assume that the college student is old enough to know his own business and that he should be allowed a free range. This attitude is not right. The faculty must not bow to the morals of the student body nor the morals of any individual student. If individual help and advice fails to induce the student to right action he should be sent away from the institution and not allowed to menace the welfare of the other students.

SOME INSTINCTIVE ROOTS UPON WHICH THE TEACHING OF MORALS IN THE PUBLIC SCHOOLS MAY BE GRAFTED

CHARLES E. RUGH, ASSOCIATE PROFESSOR OF EDUCATION, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

The invitation to the conference of the Religious Education Association to discuss this excellent report has caused me no little embarrassment. The material prepared in the hope of helping promote the special interests of that Association was not foreign to the special interests of this Council, and was in perfect harmony with the spirit of this report, but after reading

the report it seemed best to continue the discussion from the standpoint of the public school's immediate problem. Accordingly I celebrated the anniversary of our American independence by preparing another paper. It was my first intention to spend the time commending some of the excellent features and recommendations of this report, but the spirit of the day seemed to give an independent turn to the discussion.

The American Declaration of Independence was founded upon what were believed to be inalienable, inherent rights. The declaration of intellectual independence in Emerson's *American Scholar* calls upon us to do our own thinking, and to work out our own solutions to our own American problems. Let us hope for a new Jefferson or a new Emerson who may arouse us to the achievement of moral independence. In the moral life slavish imitation is suicide. The universe is a moral order. There are eternal principles of morality, as true and imperative in Germany and France as in America, but one of these principles is the fact that each social group makes special demands upon the individual members. There is a local, temporal aspect to the problem of moral adjustment.

I trust it is with due respect to Hegel and with due apologies to Dr. Brumbaugh that I make bold to suggest another analysis for the solution of the problem of teaching morals in the public schools. This analysis is not at variance with that of Hegel, but it looks in another direction. It looks to the child's instinctive life and the social order in which it must live, as sources of immediate suggestion of ways and means of moral education.

The problem of moral education is to graft social forms and achievements upon the child's native tendencies. If this be the problem, the three analyses required are: first, the individual child's native tendencies. Here we may now get some guidance from the achievements of genetic psychology. Second, an analysis of the present social order. In this field history, social psychology and sociology are pointing out social requirements and social demands. Third, an analysis of the processes of developing self- and social control. For this analysis we must frankly admit that all the knowledge of the world has not yet yielded satisfactory guidance. This last is the supreme problem of teaching and social reform.

This report does a great service to the cause of education by assuming that the question whether morals be taught in the public schools is settled and that the problem now upon us is that of the system. I take it that the descriptive term "tentative" applies only to the system, the means, and methods suggested. Here, too, I find myself in active disagreement with some of the recommendations of the report. In paragraph 2, page 31, occurs the statement that the "old dogma, 'it matters little *what* you teach a child provided it is well taught,' is giving way to a saner doctrine, 'what you teach is of prime importance; how it is taught is secondary.'" In moral education the "how" a thing is taught is one of the chief factors in

the "what." The fallacy in the doctrine announced in this paragraph grows out of the monistic disease of making correlatives alternative. Probably this disease comes from the focal nature of consciousness. When we speak of school education, often when we think of it, we emphasize either the content of the curriculum or the method of employing it. But these are not alternatives, neither are they identical. Their relation is organic; neither can be subsituted for the other; neither can be secondary. Moral education must make both the "what" and the "how" the *best*—the only kind good enough for a child.

This statement is probably only a way of emphasizing the need of reorganizing "the body of knowledge . . . . constituting the course of study." But we must remind ourselves at once that the "how" in teaching is the life principle organizing and using this body of knowledge. We may excuse this method of emphasizing the content of the curriculum since in the next paragraph the report says that the "still greater changes" are not by "accretions" but in ways that are "structural and fundamental." Now the structural and fundamental changes in education produce their results immediately thru changes in the teacher's teaching consciousness.

The immediate problem of education, then, is to awaken the individual teacher to the consciousness of the responsibility, the possibility, the glorious opportunities for the moral development of each child. This responsibility and possibility is upon the teacher without a single amendment to the constitution or by-laws, without a single new statute, without another resolution from the board of education, without a new announcement from the superintendent or principal, without an addition to the curriculum, or without another period in the program. Let this not be misunderstood. All these things may aid in the movement, but they cannot cause it. When each teacher consciously and with determined purpose sets up good moral character as the inspiring and directing aim in all her work, then there will often be another and different period in the program. Such a teacher might keep the pupil *in*, not after school, without the principal charging her with "failure to dismiss promptly." If principals and superintendents knew and felt their teachers working under such an impelling motive, there would be new kinds of announcements and resolutions of confidence and approval from boards, and new statutes and amendments. But in the last analysis, these means can only be efficient thru their effect upon the individual teacher. Immediate improvement lies in two directions:

First, the "supers"—the superintendents and supervisors, including principals—must hold up and emphasize the *super* aims of education, and not "supervise teachers to death" by prescriptions and regulations emphasizing details that crush out much of the personality of the teacher. In short, school administration must become democratic in fact as well as theory from the playground up to and including the superintendent's office. The present demand for tangible, measurable results puts a fearful stress

upon superintendents, supervisors, and principals, and they seem to satisfy these demands easier by a kind of benevolent despotism, than by educational leadership. The difficulties are multiplied, and the prompting to despotism increased by the fact that the subjects, that is, the children, are young, weak, and ignorant. In the presence of these immature children the instinctive passion for rule and for bossing sooner or later—mostly sooner, gets the best of most of the teachers and principals. In the case of superintendents the school systems are increasing in size so rapidly and removing the superintendent so far from the children that they are either developing into the spiritual leaders of the teaching force or degenerating into financial agents, or worse—political agents.

In the main we must look to principals and teachers for the social atmosphere in which the moral life of the pupil develops. The most immediate line of improvement, then, is in the development of that insight on the part of principals and teachers that will guide every aspect of the school toward efficient production of moral character. The hopeful signs of the times are the eagerness and promptness with which principals and teachers apply solutions for this fundamental problem.

A TENTATIVE SOLUTION

Formal education may be described as grafting social achievements upon instinctive roots. The primary, the strongest, and the longest continuing instincts are those serving to preserve our integrity, our wholeness, our holiness. In our bodies these tendencies favor health and growth; in our minds they work for sanity and development; in our social life they aid morality and personality; in the soul they are the instincts for righteousness and immortality. We have instinctive longings for all these good things, but the achievement of these "goods" cannot be trusted to instinct. Hunger can be trusted to bring about the struggle for food, but the helplessness and ignorance of the child along with the increasing number of foods makes it necessary for the mother to feed the child. A child's physical life and well-being is developed and insured by its being trained in correct habits of eating and developing right principles of selection of foods. Curiosity is a kind of instinctive mind hunger. It can be trusted to drive the child to seek information and knowledge, but in the complexity of things and persons, curiosity cannot be trusted to select the best information and knowledge. Sanity and right-mindedness must be developed by training and instructing the child in ways of right thinking.

The child is a developing personality because it has the social instinct for fellowship and comradeship. We can trust this instinct to drive the child to seek comradeship, playmates, and later a mate, but modern social life is so complex, so cosmopolitan, that this instinct cannot be trusted to make right selections and continue right social relations. The child's social well-being and morality is subject to the law of social development.

Persons and institutions must select, exhibit, and enforce customs, standards, and values. The fundamental law here is that the grafting of social customs and standards must use buds of conduct thru development of right motives. Burbank does not graft fruit into the old stock, but a pollen grain or a bud. The greatest fallacy in moral education has been the attempt to use adult standards and customs as means of moral development.

The greatest single instrument in education is language. This fundamental law of socially implanting standards and this great fallacy of employing adult forms is well illustrated by a child's education in language. A normal child is born with the language instinct. It has the physiological and psychic powers and mechanism for language, but society must graft its achievements in language upon these powers. The child does not congenitally inherit French or German or English. He does not congenitally inherit pure or vulgar language. The forms of language and its purity or vulgarity are socially implanted. The good teacher of language takes into account, first, the native tendencies of the child to self-expression; second, the empirical accumulation of both good and bad content and form in language; and third, the good teacher of language is inspired and guided in her own speech and instruction by the social standards of clearness, force, and elegance.

Probably the most general superstition in education is the belief that words communicate ideas, and that if a child can finger or mouth a word in a sentence or definition, that the appropriate mind processes accompany these mechanical processes. The extreme form of this superstition is the belief that if we teach children moral maxims formulated in good language that these will somehow induce moral conduct. The child may use the word "honesty" correctly, may have committed to memory the maxim, "Honesty is the best policy," and understand it in a literary sense, and still use all the devices at his command to cheat in an examination. If words do not communicate ideas, do not even express ideas, even when combined in sentences, what do they do? The teacher who can answer this question has the guiding insight for giving moral instruction. Consciousness is focal. Ideas are the psychic aspect of this focus. Most of the ideas in the child's mind are strung on a string of time in a serial order. Words are signs of ideas. They can bring this idea into the focus of consciousness, so that language is the unique social instrument for formulating or organizing the child's experience after the form common intelligence uses.

We have in language-teaching, then, a fine analogy for the processes of teaching morals, and also a fine example of the common fallacy of teaching the "letter that killeth" and missing "the spirit that maketh alive." But we must come nearer to the problem of the means and methods for moral education than an analogy. Superintendent Carr well states the chief underlying principle of moral growth to be: "to direct the fundamental instincts of children in proper channels." He has given a good list of

fundamental instincts. Let me venture to supplement the report at this point by an analysis of the last-named, that is, the social instinct, into three more primitive forms, and indicate how they get moral significance and why they are indispensable means of moral education.

Fear, respect, and affection are three aspects of the social instinct. It is true that children fear other things than persons, but they usually personify the feared object, and even ascribe purpose and evil intentions to the frightening cause. Respect is a polar correlative of fear, and is aroused by a sense of power and worth in another, but the sense of a power not likely to cause pain or destruction. Affection is an instinctive, emotional bond between self and respected persons. Prophets and seers, Socrates, Jesus, Wundt, and others announce these as fundamental moral instincts, but when we look for concrete examples of these reactions or compare their occurrence in children of today with that of the children of former times, or with children of other nations, we cannot escape the impression that the development of these fundamental instincts is on the decline. Of what is an American boy afraid, and what does he respect? One of the most enlightening processes is the examination of the cause of this change or seeming decline in the development of these elemental forms of social control. The decline in the development of the fear reaction in children is because many of the things to be feared have disappeared—wild beasts, wild men, hostile races. Scientific knowledge and the general growth of intelligence is dispersing superstition. In general, knowledge of the paralyzing power of fear has caused it largely to disappear as a means of control. Corporal punishment and pain as a deterrent is dying out. The supposed doctrine of a horned devil and a fiery hell is being replaced by the real gospel of the meek and lowly Prince of Peace.

Respect instinctively looks to power and skill in others. It gets its development by contemplating these qualities in others. When children lived and worked with their parents, the parents exhibited knowledge, power, and skill that the children did not. All this contributed to the child's comfort and helped satisfy his curiosity. These qualities were then the foundations of respect of children for parents. In the present differentiated form of industry and efficient school systems, children soon come to excel their parents in certain forms of knowledge, and soon are able to do things the parents cannot. In short, the basis, the stimulus which in more primitive times, in pioneer days, aroused this instinctive process, is gone, and if respect for parents is to be developed, it must be toward other qualities found in the parents, and if parents do not exhibit power and skill of some kind, respect for them is impossible. The physiological basis of affection are changes in heart-beats, circulation, respiration, and general organic resonance. The primary causes are the physical contact of the mother's body with the child's body, comfort and pleasure aroused thru feeding, thru care, thru fellowship. In short, physical,

personal presence is the prime condition of developing the instinctive phase of affection. The new economic order, social unrest, and present-day social life separates the mother and the child early and often. The common stimulus for discharging the instinctive, affectionate responses is often lacking. Affection on this basis is declining. The most important process in moral development is the transformation of these egoistic instincts into socializing processes. The seeming decline favors this transformation. By exercising the fear instinct a child develops the physiological and psychic means of fear and becomes conscious of how it feels to be afraid. This consciousness becomes a check to action, a means of evaluating conduct toward others. Conduct inhibited by fear of pain caused by persons with power to punish may be transformed by "renewing of the mind" into conduct controlled not by fear of pain to self, but by the idea of causing pain to some person respected or loved. This altruistic or social fear becomes a great moralizing force. Fear and respect are polar correlatives and something like an opposite process takes place in the transformation of respect into self-respect and reverence. The esteem for persons due to their power or worth to the self respecting them, comes to be transformed into self-respect thru the consciousness of kind, and becomes the direct means of the child's developing the powers and skill respected in another; and self-respect is the foundation of moral control. The change and seeming decline of the development of fear, respect, and affection may be of great advantage provided we are wise enough to set about transforming them into their moral forms. Indeed, the decline favors the transformation. The paralyzing, superstitious fear cannot be transformed into filial fear, but there is enough of the fear instinct left in all normal children to be used as the basis of right respect and moral obedience. But moral obedience is only possible in a spiritual democracy.

Formal respect gotten by fear of punishment can never be the basis of moral self-respect, because if the punisher is absent or the agent can escape detection, the fear disappears. Formal respect gotten by official demand cannot be the base of moral respect because we cannot all be officials. Moral respect must be based upon powers and values common and possible to all, so that the seeming decline of respect on the part of American youths for persons, for officials, and for the law may be looked upon as giving great promise for a new democracy, provided we are wise enough to transform this instinct to respect power and worth into intelligent respect for real power and eternal values. There is plenty of the instinct to respect power and skill in others left in every normal child to be used as the basis for this transformation. The stimuli for discharging these instincts in former and pioneer days were largely found in the material aspect of the family struggle for existence. The rising tide of life, due largely to an era of surplus, has removed many of the causes of this stimulation. The new moral order will consist in stimulating these instinctive

processes thru intellectual and spiritual valuation. This must come thru fellowship of parents and teachers with children, not in producing and consuming food, clothing, and shelter, but in producing and employing the pleasures and values of social and spiritual life. The importance of the development of fear, respect, and affection is due to the fact that their development is an indispensable condition for producing the social atmosphere in which the moral life develops. Their development is indispensable for the development of intellect as well. The school subjects in the social form now presented to children are so formal as to require the personal element to make them do their work. The multiplication table has neither form nor comeliness that children should desire it, but let it be the means of communion and fellowship with a teacher respected and loved, and somehow the respect for the teacher gives a new and even personal value to the table. If, in addition, this respected teacher shows as she ought, respect for, and enthusiasm in, this great social achievement, and she leads the child to discover that by learning this table he comes into the company of all intelligent people, because intelligent people know and use this table, then this formal multiplication table becomes a socializing agent, and may be used as one of the means in developing respect for the truth. Still more are these social instincts the basis for teaching moral maxims and rules of conduct and respect for law. The possibility of concrete application, the moral force and significance of formulated morality comes not from the formulas, important as they are, but from the personal respect and affection the learner has for the persons who practice and teach them. This is why the personality of the teacher is the most potent factor in moral education. If a teacher is not moral it is unfortunate that pupils respect her. The greatest single lever for raising the morality of the youth of the land is to raise the respect of parents and the public generally for teachers. This probably means that teachers must be more respectable in the sense that they must exhibit more knowledge, more power, more skill, and more enthusiasm. This requires more professional freedom and vocational independence. This requires better salaries, longer and better training. All these must be brought about by better acquaintance and better understanding between teachers, parents, officials, and students. In short, spiritual co-operation is the indispensable condition for the moral atmosphere in which all formal instruction must be done, whether this be the alphabet or moral maxims.

THE IMPROVEMENT OF TEACHERS IN SERVICE IN CITY SCHOOLS

HARLAN UPDEGRAFF, BUREAU OF EDUCATION, WASHINGTON, D.C.

While this subject has been presented and discussed from different points of view by some of the most able members of the National Education

Association during the past thirty years, it has never been considered in the National Council. The improvement of teachers in service is now, and will continue to be for some years, one of the most important problems connected with the administration of city-school systems. During the past quarter of a century, a large body of experience has been gathered and a vast number of individual opinions, more or less haphazard and unrelated, have been formed. Under any circumstances, it would be worth while to assemble these experiences and opinions, to secure as definite and accurate data in connection therewith as is possible, to obtain an analysis of this material by a competent body of men and women, and to present the results of such procedure for the guidance and help of all who are interested. The writer of this paper does not presume to add anything to the body of knowledge or opinion upon the subject; if this paper has any virtue, it is because it describes in a general way the present situation from the point of view of the need for a thoro investigation of the entire subject, or of parts of it, by this National Council of Education.

The topic will be presented under three different heads: (1) general considerations; (2) existing agencies for improvement of teachers in service; (3) incentives and related topics.

The justification for improvement of teachers in service rests upon two groups of facts from which are deduced two fundamental principles.

First: The principles and practices, the theory and the art of education, are constantly undergoing, in common with all other phases of civilization, modification and development. Likewise the field of knowledge in which instruction is given, and the habits which education seeks to form, are always changing. It is necessary, therefore, if the institution of education is to render its full service to humanity, if the public schools are to perform their full duty in the promotion of civilization, that every teacher, in so far as within his power lies, shall keep abreast of this development and change. No matter what the initial equipment of a teacher may be, he should be progressively efficient during his entire period of service. This means not that he should grow merely in those ways which are inseparably connected with his own individual experience, but rather that he should profit by the experience of the race in so far as it affects his own work.

Second: Many teachers are not adequately prepared when they enter the calling. Not a sufficient number of persons are attracted by the salaries and other advantages to furnish a sufficient supply of adequately trained teachers to fill the schools or to warrant adequate preparation being made for the work. Furthermore, it does not appear to a large part of the public that any particular preparation is necessary or that such service requires liberal compensation. We are in a transition stage in the development of a teaching profession, and consequently, in the training of teachers. Teachers who are not adequately prepared at the beginning of their period of service have a handicap to overcome. They should, in justice to that

portion of the world's work which they are striving to do, remedy their lack of sufficient preparation, and in addition keep abreast of the current of advancement in educational thought and practices in so far as is possible.

Third: If the improvement of teachers in service may be justified upon grounds like the above, it follows on the one hand that the state has a right to expect and to require reasonable professional advancement in all whom it employs in its public schools; and on the other hand, that all teachers who have a proper conception of their duty to the state will endeavor to realize this reasonable improvement irrespective of whether the state requires it or not. The state and the profession should work hand in hand. The state needs the expert advice of the professional teachers in conducting its educational system; the profession needs the state to furnish those educational agencies by means of which its members may be brought to a high standard of attainment.

Fourth: Under our form of government the central or state officers exercise relatively little authority in matters affecting the improvement of teachers in service except in the matter of certification, and most larger cities are freed from their control in this respect. The states do, however, commonly provide universities and normal schools and other educational institutions which teachers, active or prospective, may attend. The responsibility of securing protection against inefficient teaching, and of building up those teachers who are inadequately prepared and of keeping the entire corps in a healthy and progressive condition is placed in our form of government upon local boards of education. The mutual obligations of the profession to the state and of the state to the profession must be worked out between the people of the community as represented in its board of education and the members of the educational body employed by it.

Fifth: As is true in every profession, the leaders have been most prominent in advocating and supporting among the teachers the things that would advance all the members of the teaching body. Naturally, also the most prominent of these leaders in each city, has been the city superintendent of schools. On the one hand, it has been his advice as the chief educational expert in its employ and as its trusted chief executive officer in educational affairs, that the board of education has largely followed in taking action upon such matters. Thus the superintendent has a double function, as a member of the profession, working among its members for their improvement, and as the expert agent of the state in recommending such regulations as will best promote such an end. In other words, he has two influences which he can bring to bear to secure the improvement of teachers in his corps, both of which are equally justifiable: first, as leader in a profession, a democratic relationship; second, as an officer of the state, an official relationship.

Sixth: With a view to raising the dignity of the vocation of teaching so that persons of superior abilities would enter it and so that those already

in the calling would be more fully warranted in improving themselves, laws have been passed in recent years giving to teachers in certain cities, practically a life tenure and taking away the embarrassments connected with recertification. Both of these classes of laws have removed certain stimuli that worked upon these teachers who do not have sufficient professional spirit to cause them to maintain progressive efficiency, or to remedy deficiencies in professional preparation.

Seventh: Following the movement for improving the teaching profession by removing some of its limitations in regard to tenure and certification, came the movement of furnishing an incentive to teachers to improve their professional status in the form of increased compensation. Salary increases were made dependent in part upon satisfying supervisory offices by examination or otherwise that certain amounts of professional or academic study had been successfully accomplished. This movement in fact characterizes the past decade in the history of improvement of teachers in service in city schools. While not adopted in any considerable number of our cities, it exists in some of our best systems. In some cities, it has met and succumbed to the opposition of the people as influenced by the teachers who did not favor it. I fear that thru this connection of improvement in service and of salary increase, just at the time when the cost of living was advancing so rapidly, has together with the creation of life tenure and of permanent certification, worked against the development of right professional ideals in teachers who have, for one reason or another, become prejudiced against those in legislative and executive control of the various school systems. A thoro, impartial study of the entire question just at the present time would, in my judgment, operate to relieve this situation and at the same time would greatly promote interest in the improvement of teachers in service as well as increase the efficiency of the agencies used for that purpose.

Eighth: As the teaching body becomes increasingly professional in character, more and more weight should be given the views of teachers in matters pertaining to their professional status and work. A careful consideration of the opinion of teachers relating to improvement in service is much to be desired at the present time, and particularly the views of those who are in fact professional in ability, in spirit, and in breadth of view.

For our present purposes the agencies now in use for the improvement of teachers may be divided into three classes: first, those that center in the supervisory officers; second, higher educational institutions; and third, voluntary co-operation among teachers.

To the first class of agencies belong the individual assistance given teachers by supervisors; the various types of teachers' meetings—grade, building, and general; and visitation. As regards the extent of our knowledge relating to the assistance given teachers by supervisors, all agree that the devices employed differ according to the knowledge, experience, and temperament of the supervisors and teachers concerned in each

individual case. An attempt has been made to differentiate teachers into classes from the point of view of the character of supervision required for each class. I refer to the classification of Mr. J. H. Van Sickle as given in the *Southern Educational Review*.[1] We need to know whether the classification thus made is applicable to city systems generally, and if not, what is the best classification. We need also a similar classification of supervisors, based upon inquiry and an authoritative statement regarding what each class may generally undertake with each class of teachers in the way of individual direction.

Among devices that are used by supervisors we know in a general way of term plans, daily lesson plans, plan books, conferences, demonstration lessons, suggested readings, but it can hardly be said that the experiences of all those that know how to use these devices best have been brought together and conclusions based upon them for the guidance of those not so well qualified to speak. We need also to know the best for each type of school system—for the large system with its large number of well-trained supervisors, and for the smaller system with supervisors of less number and these more poorly trained; and, to obtain this knowledge, we must know of the experience of these smaller cities in this particular.

Much that has been said regarding the individual assistance of teachers

[1] Teachers in actual service and more or less in need of after-training may be considered in groups which omitting minor differences, are somewhat as follows:

1. Superior teachers who need no stimulation other than their own ideals of excellence. By the fine standard of work which they maintain and by their student-like habits they might, under favorable conditions, set the pace for the less efficient. With this group, supervision is chiefly concerned in gaining their co-operation in working out problems and in making their skill serviceable to other teachers.

2. Teachers possessing a good degree of executive ability and adequate scholarship of the book-learning variety, who resist change because they honestly believe the old ways are better. They are patriotic defenders of the views and traditions and practices in which they were reared. The greater number of these will as strongly support the new when fully convinced of its advantages; but in the absence of positive orders they resist proposed changes until absolutely conclusive demonstration is furnished in a concrete way. Supervision must confidently accept these conditions and furnish the demonstration.

3. Teachers lacking adequate scholarship or practical skill, or both, self-conscious and timid, because unacquainted with standards of work and valid guiding principles, desirous of avoiding observation, doing their work in a more or less perfunctory and fortuitous way. Supervision needs to give these teachers courage by an exhibition of standards plainly within their reach and by personal work in their own schoolrooms.

4. Teachers lacking adequate scholarship or practical skill or both, but not conscious of this lack and therefore unaware of any need of assistance. Some form of positive direction is here necessary in the first stages of supervision.

5. Teachers yet in the early years of their service. They have, as a rule, had some professional training and from it they have gained one thing at least of value beyond all else: namely, a professional attitude toward the work of teaching. Supervision should be able to concern itself chiefly in keeping these teachers in Class 1 so far as their professional attitude is concerned. There will, of course, always be differences among them in scholarship and personal power, but all should have guidance in kind and quantity adapted to prevent any of them, even the weakest, from developing the characteristics of Class 2, Class 3, or Class 4. If these new recruits are to be able to lead children to be open-minded, to hold opinions tentatively, to be sure but not too sure, to be willing to give both sides of a question a hearing before reaching a final conclusion, they must keep themselves open-minded. To aid them in doing this, supervision will keep itself free from dogmatism even in dealing with the youngest teachers.

Teachers of Class 1, Class 2, and Class 5 are willing to have their work seen and valued by competent and trusted supervisors. People who know how to do a thing, or who sincerely think they know how, or who sincerely wish to learn how, are neither afraid nor reluctant to have their work seen by any fair-minded person. Supervisors must be both skillful and fair-minded, and their work must prove that supervision means help. How shall the help be rendered? The need to be met has been thus aptly stated by a skillful supervisor.—*Southern Educational Review*, IV (February, 1907, to January, 1908), 225–26.

by supervisors is equally applicable to teachers' meetings. Should there not be different types of teachers' meeting for different classes of teachers? In what ways may the abilities of superior teachers be made to contribute most to other teachers in meetings in which teachers of varying abilities come together? What kinds of teachers' meetings may supervisors of various types of ability rightfully attempt to conduct? What is the value of each type of teachers' meeting for cities of various groups according to population? Should meetings be regular? Should they be compulsory for all teachers, for certain classes, or for none? Upon these questions there is a vast mass of individual opinion, written andunwritten, expressed and unexpressed, of supervisors and of teachers, but these have never been assembled, critically reviewed, and conclusions drawn therefrom as the consensus of professional opinion.

As to visitation we know that there is a somewhat general practice of giving teachers from one to four or more days per year for observing the work of other teachers; that in some cities it is wholly voluntary, in others compulsory to a degree, and that it is more or less closely supervised. A definite knowledge of the exact methods which prevail in cities of various sizes and of the results of those methods would be of considerable assistance to all engaged in the administration of schools.

Among the educational institutions which contribute to the improvement of teachers in service are the institute, the summer school and the summer sessions of universities, colleges, and normal schools, extension classes of such institutions, and correspondence courses. As the first two are attended almost entirely by rural teachers or those who hope to become such, consideration of them may be set aside in this paper. The following statistics, showing the extent to which the other agencies exist at the present time, are taken from the page-proof of a number of the *Bulletin* of the United States Bureau of Education, soon to be published upon "Agencies for the Improvement of Teachers in Service," by Dr. W. C. Ruediger, professor of Educational Psychology in the Teachers College of George Washington University. Dr. Ruediger reached the conclusion from an examination of the catalogs on file in the Bureau of Education, that between 25 and 30 per cent of the state normal schools have summer sessions continuing from five to thirteen weeks. The list includes schools in 26 states. The most frequent length of session was six weeks. Presumably all who attended were actual or prospective teachers, but no statistics were available as regards even the number who attended.

We need to know: (1) whether they were urban or rural teachers; (2) their experience; (3) previous preparation; and (4) courses pursued.

Dr. Ruediger was able to secure very satisfactory statistics relating to the summer sessions of colleges and universities, altho his data are far from complete. In 1908, according to reports made to the Bureau of Education, 97 colleges and universities maintained summer schools, an average of

two to each state. In order to ascertain the percentage and classification of teachers in these schools, an inquiry was sent to 20 institutions, from which fourteen replies (all of them from prominent schools) were received. The tabulation of these figures shows that 50 per cent of the summer-school enrollment was composed of teachers. Of the teachers, 7 per cent were college teachers; 6 per cent normal teachers; 42 per cent high-school teachers, principals and superintendents; 41 per cent elementary teachers and principals, and 4 per cent rural teachers. Fifty-seven per cent of the summer-school enrollment were working for degrees; the percentage of teachers that were studying for this mark of advancement is not given.

These statistics need to be extended both as to number of details and to number of institutions. One of the most important things to ascertain is what proportion of the teachers return to the same school system and, anticipating a subsequent topic, what modification of tenure and salary resulted from taking such courses. We need to know also certain fundamental things about the individual teachers who attended—to what class of teachers mentioned above does the teacher belong, previous experience, previous preparation, course pursued, and if possible, the effect upon the teaching power in individual cases.

Summer sessions of city normal schools are held in St. Louis and Chicago. These are examples of city training schools which are accomplishing much for the improvement of teachers already in service. The entire subject of the position of the normal school in relation to these teachers requires careful consideration. It is not altogether improbable that the best solution of many of the problems relating to this subject can be reached thru the city training-school when placed in proper relations to the other parts of the school system.

Extension classes and correspondence courses of colleges, universities, and normal schools are in many respects like the summer sessions from the standpoint of the present discussion and may be investigated in a similar manner. It seems that correspondence courses as a means of improving teachers are developing rapidly, and it is quite possible that if rightly managed they may be made of great benefit in this direction. Dr. Ruediger mentions thirteen colleges and universities and five normal schools as offering correspondence courses which would serve as agencies for improvement of teachers. In addition, there is the work of the private correspondence schools, concerning which very little is known.

Voluntary co-operation among teachers in the formation of clubs for study- and reading-circles is common, but no careful study has been made of their plans of work and of the results obtained. Opinions differ as to their effectiveness as compared with the teachers' meetings directed by school supervisors. The state reading-circles are conducted primarily for the benefit of teachers in the rural districts and towns, and except in a few states the teachers in cities do not follow the readings laid down by

them. The question of adapting reading-circle work to the needs of city teachers deserves careful consideration.

Among the incentives that are used to promote improvement of teachers in service are: (1) system of certification; (2) merit system of determining increases in salary and elevation in position; (3) sabbatical years; (4) special funds to aid teachers in promoting their efficiency.

The essential elements in a system of certification which promote improvement of teachers in service are: first, the limitation of duration of certificates and of the number of times which a certificate of the same grade may be granted; and second, making the additional requirements of each higher grade of certificate such that the teacher will have to improve in her professional and academic ability in order to secure it. A large number of states have incorporated this feature in some part—most frequently the lowest—of their systems of certification, but there are but few cities which make use of their system of licensing teachers to bring about this improvement. This plan has the advantage of making it clear to teachers that tenure of position is not conditioned only upon rendering efficient service upon the same plane upon which it was begun, but that there are also certain advanced stages which must be met in due time. The incentive thus becomes not a question of salary increase, primarily, but of tenure of position. It is quite probable that one or more model plans of certification could be worked out, based upon experience of states and cities, which would work hardship in a minimum number of cases and at the same time greatly promote increased efficiency in the teaching corps. The entire subject furnishes a fruitful field for investigation.

The merit system of determining either in whole or in part increases in salaries of teachers involves two features: (1) efficiency markings or success grades based on work in the classroom; (2) examinations to test growth in professional or academic knowledge. The strong, and in some cases the successful, opposition to each of these plans that has been met by those who have had placed upon them the responsibility for the conduct of schools—the school boards and their chief executive agents, the superintendents and district superintendents—makes it highly desirable that the use of such means for promoting the improvement of teachers be studied with the greatest care by an authoritative body.

With this question that of tenure of teachers is closely associated. Long tenure and permanent certification have been advocated as necessary prerequisites for the establishment of the profession of teaching. Recent developments raise the question whether in our zeal to give dignity to our calling we have not advanced too rapidly. Would it not have been better for those possessing the professional requirements to have endured certain so-called "indignities" in the form of re-examination and re-election than to give opportunity for those whose professional ideals are relatively low to check the development of professional ideals and professional spirit? If

a reasonable system of incentive and rewards fails to accomplish its object, must we not of necessity return to the lower level of temporary certification and tenure in order to insure improvement? This is in fact the *crux* of the present difficulty in certain cities, and it deserves our thoughtful consideration.

Sabbatical years are allowed teachers in three Massachusetts cities—Boston, Cambridge, and Newton. The methods followed and results of the use of this incentive in these three cities should be made known to city boards of education and the teaching profession thruout the country. Likewise the improvement of teachers in service that has resulted from the administration of the Gregg bequest and other funds in Indianapolis, the Schmidlapp fund in Cincinnati, and the $250,000 fund in Pittsburgh intrusted to Dr. John P. Brashear, should be studied in order that those who may be interested may have an authoritative source to consult regarding it.

The methods followed in the pursuit of such studies as have been indicated and of others connected with the general subject, should be worked out with the greatest care. In so far as is practicable the facts should be gathered in such form as to make them susceptible of scientific measurement.

DISCUSSION

Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.—A city school system is in most cases like any other large plant—it must find and employ its help from the sources whence these offer themselves. Having passed the minimum requirements or become legally certificated, they present themselves for assignment to duty.

Some of them come with normal training and experience; some with only scholastic training and experience; some with only normal training; rarely with only scholastic knowledge. The beginner with "professional training" has yet to learn that actual, responsible schoolroom teaching, coupled with the management of a class, is as different from "normal practice" as swimming in deep water is from going thru the swimming motions lying on a table; the teacher of experience may have pulled the laboring oar in a country school, in a village classroom where the conditions were more difficult and harassing, in a graded system where standards were low or where distorted ideas of values or a poorly balanced curriculum had resulted in the formation of bad habits or left the candidate unable to do many of the things done by the teachers in a well-ordered system of schools. This product the management of a city school system must take and from it must be fashioned, if the schools are to prosper as they should, a force of intelligent, industrious, capable workers, able to do, in craftsman-like way, the labor of a journeyman teacher, and able to get on comfortably with the others working to accomplish the ends set for attainment in the system.

We shall make a mistake and shall be unreasonable if we expect teachers to be consumed with zeal for improvement. They are, at bottom, human and much like other people. It is only your true missionary, with the crusader's spirit, who is eternally driven by the inner fires, whether he or she be preacher or physician, or housekeeper and mother, or teacher. Teachers are of a rather higher class, and of more culture, but the joys of life and its normal and proper comforts and relaxations appeal to them, much as they do to the superintendent of schools or to the housewife or the mechanic or the merchant. They are generally willing; their employment is one which, by its oppor-

tunities and its contact with fresh young souls, is rather more likely than the usual to touch their spirits with altruism. And yet they want their work made comfortable for them; they do not want it to rest as an incubus from day to day. They like to have the things to be done and the expected quality of performance made plain; if there is a better way than they know about, they like to have it pointed out; and if they do not seem to be able to follow the suggestion, they like to have some one show them how.

Every school system should, and, it is assumed, will have in it a large proportion of teachers experienced in its service, familiar with its aims and requirements and trained in putting these into execution. What school has not in it the teacher, or more than one, who has the genius for teaching, who is an inspiration to the pupils, a restful friend to her fellow-craftsmen, to both "as the shadow of a great rock in a weary land"? But there comes every year into a school system of any size an influx of new help, indifferently trained, or differently trained, whose methods and performance need a good deal of shaping up before the results are what they should be. And so, not only for these, but also because of the fact that new lines of work, more or less unfamiliar to all teachers, are now and then introduced and new and supposedly better methods given a trial from time to time, the improvement of those already in service becomes a real and very present problem for every administrator of city schools.

Structures rise upon foundations; the foundations upon which the structure of improved work by teachers must rise is a thoro knowledge of the conditions of the work, both in the system in general and in the rooms of individual teachers. No system of schools can be administered or greatly improved from the office or by means of bulletins and circulars. Where the city is so large that the responsible head of the system cannot himself visit and inspect frequently enough to know with substantial correctness what kind of work is being done every day in every schoolroom in every lesson, some one who represents him, and is charged with responsibility for the success of a part of the work, must know these things for him. Teachers must not be visited or inspected so often as to hinder or embarrass them; but some one must *know*, and where suggestions or help are needed, the suggestions or the help must be forthcoming.

Enough general supervision will be required to cover the teacher's discipline and general management, to see that ideals and standards are comprehended, that the relative importance of studies and of portions thereof are regarded, and that the common subjects, which all teachers are supposed to be versed in and able to teach, if properly directed, are attended to.

In any large city system the special work of the primary grades and the number of inexperienced or inexpert teachers often placed in the upper classes of the primary grades because the difficulty of maintaining good order in the class is less, are likely to warrant the employment of a supervisor for the special primary work and the training of these new or unskillful teachers. At least until such time as practically all of our teachers come to us as well versed in music, drawing, gymnastics, elementary manual training, and sewing, and such new subjects as there are now in arithmetic, reading, and the other common branches, it will be necessary to have special supervisors for these subjects, as a matter of fixing standards, showing the way and training the inexpert teacher.

Supervision by principals is an important link. We find many of these who are in the positions seemingly by accident, with no special quality to recommend them for it beyond a modicum of confidence and a sort of executive and perhaps disciplinary ability; on the other hand, we have some who seem to have every grace of knowledge and skill and leadership, who can see and understand, show and train, lead and inspire their assistants, not only capable to be their guides and helpers in the commoner work, but in the special subjects as well. It is too much to hope or expect all or a majority of principals to be of this latter class. Few have the talent or the training to give the skill of the special-

ist in all of the lines of school work. As schools grow larger, numbering hundreds, sometimes thousands of pupils, the executive duties of the principal become so large that it is impossible to follow out all the special work and its performance and the instruction of teachers in it, even if the ability were to be expected. So the principal may, without humiliation or impropriety, depend much upon the various supervisory officers for the detailed criticism and assistance of teachers. This much, however, the principal may be expected to do: to become familiar with the general scope and plan of all the work in all subjects in all the grades in his school; to be in each teacher's room often enough to know how the work in each subject is progressing; and to consult with and help each supervisor to keep in touch with the work of each teacher, see that the plans are understood and carried out by each teacher, and that the teachers are not allowed to overlook or neglect plans and instructions. By such careful and detailed supervision the principal, who ought not to be expected to be a specialist in numerous lines, can amply justify his existence and the existence of the position which he fills.

The statue was in the mind of the sculptor before it was hewn from the stone; the picture was seen of the eye of the painter's soul before it took shape upon the canvas; the temple stood forth to the architect's imagination before its columns and arches sprang in stone. So the leader of teachers can do most for those who work with him if he shows them the vision of their work, fair and excellent, for their appreciation and emulation.

To give ideals, to set standards, to show the proper finish and quality of workmanship is well; it is necessary. But there is another thing more important still: to awaken the desire for realization, that the vision may become the reality. And the most successful leader, who would do most to improve the teachers already in service, must touch the springs which make his associates greatly desire to bring their work to its best quality in completeness and finish. It is not merely to plan wisely, to inspect carefully, to explain clearly, to illustrate skillfully; it is also the spirit of the leader which kindles a like spirit in the helper and makes him the doer of the finest things because these are the goal of his high desire.

John R. Kirk, president of the State Normal School, Kirksville, Mo.—Some superintendents take themselves too seriously. They consider that they are the source of all inspiration and example to their teachers. The best way to help a teacher is to put some direct searching question to her or make some fertile suggestion that will stimulate thought. Improvement will not come by following rules, prescriptions, or formulas. It will come if teachers are given the opportunity for self-development and if the authorities place great trust in them.

William M. Davidson, superintendent of schools, Washington, D.C.—There is no way to improve the teacher so surely and effectively as to see to it that she is an adherer to rules and ideals. This is intangible, and cannot be discussed, yet it must be realized if improvement is to occur.

Nearly every teacher must pass thru three stages: device, method, and philosophy. A realization of these three stages is essential to proper development and improvement. Thru these three phases ideals are realized. In the lower stage, that of device, much good work is done; however, if the teacher remains in this stage she becomes a mere marker to it, she must move out of it and into the method stage, and thru that into the last stage of philosophy, if she is to become the highest type of teacher. The real teacher must be able to give information, to illuminate her work, and to inspire her pupils.

James M. Greenwood, superintendent of schools, Kansas City, Mo.—In many school systems the main trouble in the improvement of teachers is often in the principals and supervisors. Many of these cannot be of help to their teachers. Some of them busy themselves with the mere supervisory things connected with the school work and have no

just appreciation of the real teaching. Some others cancel their usefulness by giving too much direction.

EDWIN S. MONROE, superintendent of city schools, Muskogee, Okla.—The distinguished superintendents who have preceded me have touched upon all the points I have noted for this part of the discussion, and all that is left for me is to emphasize one or two features brought out.

In my judgment the most effective means of improving the teachers in the service of city schools is efficient supervision. A teacher who is under the constant eye of an efficient supervisor, if she be healthy in body and buoyant in spirit will grow—her methods will improve, her outlook will become enlarged, and her vision broadened. The beginning, therefore, of the improvement of the teacher is the improvement of the supervisory force.

The most important factor in the improvement of the teachers is the principal of the building. The principal must be a man or a woman who has scholarship sufficient to encompass the school problem. He must be kindly and sympathetic and be endowed with all those qualities of leadership which inspire confidence and reliance in his directions. It is the constant checking of error of method, the inspiring to do better on the part of the teachers by a principal in whom the teachers have confidence, that will bring about sure improvement. No other force in the school is so potent, no other aid is so near as the principal; and I would assign to his influence the largest measure of responsibility in the improvement of the individual teacher. No one can know the individual weakness better and no one is so close and constant to apply the remedy needed. The supervisors of special subjects would necessarily bring about one-sided improvement—improvement in their own special lines—but the principal is at hand to bring about symmetrical growth. He is there to see that the means suggested by the superintendent are properly used and that the largest measure of fruitage shall be secured from the equipment placed at his disposal for the advancement of the teachers in his building.

Of course on the shoulders of the superintendent falls the supreme burden in the way of suggesting and planning for the professional growth of his teachers. To do this he must meet his teachers frequently and come into as close contact as possible with their work. 'Tis true that most of his work is done thru the principals, but he must by personal visitation of the teachers at work find by personal observation that his suggestions and plans are being carried out.

The general teachers' meetings are his chief opportunity for establishing the policy of the schools and by his inspiration and leadership he must direct the professional improvement of his teachers. The kinds of teachers' meetings, the mode of conducting them, the matters considered, etc., I shall not attempt to discuss. They will vary as the demands of the local conditions vary. The superintendent must know the needs, the conditions, and measure up to the responsibility. He is the center of influence which should permeate the whole system inspiring the teachers to nobler ideals, filling them with enthusiasm for accomplishing their work each day better than the day before. He should so direct his work that each teacher would feel the individual need and strive to overcome the need by effort to fulfill it at whatever cost or sacrifice it may entail. Not only should the teachers be made to feel their individual needs, but they must be made to understand their personal source of power and inspired to cultivate those faculties which bring individual success.

The superintendent must needs bring to his teachers the inspiration of other leaders than himself in order to promote their improvement. He will, therefore, bring before the teachers for addresses in the general meetings men who have accomplished something, especially leaders in educational lines. He will also bring to the attention of his teachers books and educational articles in magazines, periodicals, etc., that should be read. Extension courses of lectures are valuable and well-directed courses of reading

should be planned. In whatever is done, however, the teacher's improvement should be kept in mind—no work should be assigned for the teachers just for the sake of giving them something to do. Nothing brings such joy and enthusiasm to the true teacher as the knowledge of the principles underlying her work, and I have found that no amount of general reading, listening to lectures, investigating, preparing reports, etc., is considered burdensome that adds to her teaching power and special professional improvement.

HIGH-SCHOOL PREPARATION OF CANDIDATES FOR NORMAL-SCHOOL TRAINING

I. DAVID FELMLEY, PRESIDENT, ILLINOIS STATE NORMAL UNIVERSITY, NORMAL, ILL.

The question before us may be understood in two ways:

1. Shall high-school preparation be required of all candidates for normal-school training?
2. What shall be the character of such high-school preparation?

In this paper both of these questions will be discussed.

With respect to their preparation, three classes of students enter the normal schools. The first are high-school graduates. City training-schools usually admit no other kind of students. State normal schools in regions where the high schools are well developed, or where public sentiment demands a high standard of academic and professional preparation for teachers, usually plan their courses primarily for these, their most numerous class of students. In such schools the percentage of men students is low. For causes well understood few young men graduating from the high schools look to teaching as a vocation. If they do so, they are more likely to enter the college than the normal school.

The second class comprises teachers of some experience. These are usually without full high-school preparation. Thru elementary schooling and private study they have attained sufficient scholarship to pass the examination for the lowest grade of teacher's certificate. They have taught in country and village schools. In most cases they have not taken up teaching with any thought of permanence. They have discovered that they like the work and have discovered also their own limitations. They resort to the normal schools, especially to the private normal schools and to the state normal schools with a large rural constituency, to obtain the professional preparation needed to satisfy their own sense of responsibility and to admit them to the more desirable positions. These students are in many of our states the elect of our profession. They are selected from the great mass of untrained beginners by real personal fitness and divine vocation. Here are the men who become village principals, county and city superintendents.

It would be folly to turn these people away from our state normal schools by requiring high-school graduation as a condition of admission.

Where else can they go? They are too mature to enter the high school along with the fourteen-year-olds. They are not ready for college work. The only doors open to them would be the private normal schools and private academies with their scanty resources and meager equipment. No state can afford to exclude these really choice people from the ranks of its teachers or deny to them the fullest opportunity for adequate preparation. Until the state requires of all teachers four years of high-school preparation, the normal school should admit this class of students and provide for them strong courses in the various branches of study along with professional training.

The third class of students entering the normal schools range in years from fourteen to twenty or more, are without teaching experience, and have not had complete high-school preparation. Of these the younger should not be admitted. I should draw the line at sixteen for girls, seventeen for boys. Most students below this limit are still children. They lack the reflective habits, the concentration, the physical vigor needed to keep pace with older students of equal school preparation. Because of their immaturity they lack the professional interest and serious purpose that should pervade the normal school, and can find better opportunities in a good high school. Above this age the conditions are similar to those obtaining with the preceding class, with the very important exception that they lack the acquaintance with the problems of teaching that experience has developed. The same rule should govern their admission to the normal school. If under the law they may secure license to teach without a high-school course, they should be admitted to the state normal school. If they are going to teach, the best opportunities for preparation that they can use should be open to them.

It thus appears that the question of admitting students to the normal school must be settled according to the laws in each state governing the minimum requirements for a teacher's license. This in turn will be governed by the development of the high-school system, the rate of teachers' salaries, and the public demand for well-educated teachers. The high standards set by California and Indiana will be adopted in other states as soon as the public is convinced that a full high-school course represents the minimum of academic preparation that the state can afford to accept in its teachers.

The next question is: What shall be the character of this high-school course? With the growth of the elective system in our high schools, the diploma has come to stand for any of a great variety of courses of unequal value in the education of the teacher.

Inasmuch as the elementary school deals with the elements of those arts and knowledges that are fundamental in our civilization and of large value to people in every walk of life, the elementary teacher needs a broad course,

In the normal school itself her time will be occupied with studies in education, in psychology, in the principles and methods of teaching, in actual practice in the training school, in a review and reorganization of the branches of study from the teacher's point of view, in a detailed study of the newer studies that are finding their way into the curriculum, and in studies in sociology, economics, and literature that will nourish her deepening interest in our social problems and bring her to a true estimate of the meaning and purpose of the school. Little time can be devoted to repairing defects in early education.

First, the teacher needs a broad equipment in the biological and physical sciences. The modern world is a world of applied science, and some knowledge of the nature sciences is needed everywhere and in all callings. But the high-school science needed by the future teacher is not the course that the university imposes upon the high school in the interest of future physicians or engineers. Physics and chemistry should not be given over to physical measurements, to the verification of physical constants, or other quantitative work. What the common citizen needs is to understand the world about him, an explanation of the phenomena of nature and of industrial processes—of dew and cloud, of lens and mirror, of telephone and gas engine, of soap-making and oil-refining, of leavening and cleansing agents. We are now charging the teacher with a large responsibility for the physical education of the children, for due attention to school hygiene, and instruction in personal hygiene. But such instruction, to be rational and effective, must rest upon a knowledge of physiology, and of physical and biological laws.

But the teacher needs this knowledge of science not merely for its practical and economic value. A large part of the joy of life comes from a love for and an appreciation of nature. I have just spent a week with a party of twenty-eight in the Yellowstone Park. All alike enjoyed the geysers, the deep coloring of the pools and canyon walls, the great falls, the sapphire sky, the mighty forests, the deer and bears, and other conspicuous or novel phenomena; but as it seemed to me, the trip meant most to a young woman in the party, a good botanist in the flora of the Middle West, who recognized at every turn in new species the familiar genera of Illinois.

Along with this knowledge of nature we must put a knowledge of the ways of men, of their modes of co-operation in institutional life. Institutions are to be known not merely in their present organization, but in their history. In fact, the chief value, if not the only value, of the study of history on the intellectual side is in order that we may understand our institutions as they are, what forces and conditions have molded them into their present form. Do these conditions persist? Would other institutional forms afford freer movement to the life of our people?

The teacher should know arithmetic in its practical applications, and so much of algebra as contributes to a better insight into the unity of

arithmetic. To this we must add enough of geometry to give familiarity with the forms of deductive reasoning. Much of the algebra and some of the geometry now included in our high-school courses are quite superfluous in the preparation of the elementary teacher. Mathematics obtained its footing in our colleges and secondary schools chiefly thru the influence of John Locke. He believed that the chief function of studies is to train the mind, not to nourish it; and that of all studies mathematics is best adapted to develop the reasoning powers. Both of these views are probably mistaken.

It goes without saying that the teacher should have a wide acquaintance with our best literature, should appreciate it and love it. Literature is supposed to consist of the best thought of the best men and women of all time, set down in permanent and beautiful form. But literature, especially poetry, embodies the ideals of our race. In the poems of Homer and the psalms of David it was the chief vehicle of moral and religious instruction for the two most influential peoples of antiquity. It appeals to the emotions, converts ideas into ideals, and determines the moral quality of our reflective acts.

The teacher needs more than a broad acquaintance with much literature; she should be ready to quote hundreds of passages, especially of the literature usually studied in the elementary school. For illustration and effective appeal nothing is more potent than apt quotation of this sort. While this knowledge and the power it gives should grow with the years, it is evident that at the outset the teacher should have a generous equipment.

Every teacher should be a master of English, which means not merely that her speech shall be grammatically correct and that she speak and write with clearness, coherence, and energy, but that she recognize bad English when spoken or written, and wherein it is bad. Many high-school graduates speak badly because they think badly. Their thought is illogical, lazy, and incoherent, hence their language reveals these qualities. Others use slang, provincialisms, and ungrammatical speech. To form good habits of speech in high-school boys and girls, every teacher must needs be an English teacher. In no other way can the desired result be secured; yet we find in our larger high schools a disposition to hold the English department wholly responsible. It would be just as logical to hold the physiology teacher responsible for every case of round shoulders.

The teacher must read well and speak well, must write a good hand, must arrange her written work upon the blackboard in logical and beautiful form. It is desirable also that she sing well and draw well, and that she have fine manners. We all know that in the elementary school the teacher's own example in these matters of form is quite as potent in determining the pupils' practice as any direct instruction can be. We know, too, that

the time for forming good habits in these things is during the adolescent period—from the twelfth to the eighteenth year. Now, all arts are acquired thru practice under wise direction. There must be intelligent direction by the high-school teacher, there must be patient drill and unremitting attention on his part; but above all there must be the stimulus of the fine example. As pointed out in the admirable paper of Professor Rugh, Saturday night, the teacher who is respectable because of his genuine excellence in these lines of worthy endeavor is the teacher who will win the respect and confidence of his pupils.

It may seem to you that the program mapped out for the high school is a large one and can scarcely be attained under any conditions. The chief obstacle is the traditional element in our high-school curriculum. The German gymnasium and the English grammar school of the sixteenth century, the prototypes of the modern high school, set up as their distinct aim to enable their students to write and talk like Cicero. They devoted themselves unremittingly to this one end and achieved fair success in some cases. No high-school teacher would acknowledge this aim today. Yet thru the force of habit, the tendency to teach as we were taught and what we were taught, the disposition to take the course of study for granted, as part of the divinely ordained system, we find high-school pupils devoting 40 per cent of their time and energy to the study of a language that they rarely master and which would be of no use if it were mastered. Various reasons are urged for keeping Latin in the high-school curriculum. It is said that translation is an admirable exercise in composition. Yet in comparatively few classrooms does translation give any real command of idiomatic English. There is too much "Caesar said himself about to be made more certain." It is urged that the grammar of our language can never be understood unless compared with another whose way of expressing things is different. The ancient Greeks developed all the great types of literature and became excellent grammarians and students of style without any study of a foreign language. In fact, I have never found any advocate of the traditional curriculum who had the courage to admit that in the absence of Latin we ought to invent some such language to set up as a dummy with which to compare our English forms of expression. It is urged that the study of Latin gives a knowledge of the derivation of thousands of English words. Then why spend so much time on inflections and Latin syntax? Six months' diligent work on Latin roots, prefixes, and suffixes will give one greater power in this field than the four years' high-school course in Latin. Moreover, the derivation of a word, while often curious and interesting, rarely helps us to a knowledge of its exact use in English. Take, for example, the words "biscuit," "arrive," "temperance," "person," "improve," or the legal terms "venire" and "subpoena." The truth is the value of a word as a vehicle of thought and

feeling depends not upon its derivation nor yet upon what it denotes—its mere dictionary meaning; it depends rather upon what it connotes and suggests. If half of the time now given to Latin were spent in our best English literature, with equal fidelity and thoroness, the outcome in power and culture would be of far higher value.

We make much nowadays of the definition that education is a process of adjustment. Are we not in our high schools adjusting our pupils to a primitive and obsolete type of civilization when we devote 40 per cent of our students' time to the study of the language, the literature, the government, the customs, the wars, the religion, and superstitions, of a people for fifteen centuries dead, while we expect them to pick up incidentally the greater part of the knowledge that will enable them to earn a living, to discharge their duties as citizens, and to serve their generation?

I would add that there are certain elements of personality that the high school may develop.

The high school may develop good habits of study. This phrase includes the self-denial that turns a deaf ear to the mere solicitations of pleasure; it includes the love of excellence; it includes the appreciation of the things of the mind and real delight in learning, but it includes with these conformity to the laws of mental hygiene. It means such analytic attention as seizes the main point of a paragraph and relates the attendant material.

Lastly, the high school should develop students with genuine enthusiasm. They are educated most by what they love and admire. If they are bent chiefly on having a good time, as the phrase goes, on being "popular" with their schoolmates, they are not the best sort for teachers. But if they see some part, at least, of the world not only as it is but as it ought to be, and if they are willing to dedicate themselves to bringing this better day to pass, then there is hope. All this means, if it means anything, that the high school should not be ruled by conventionalism, but by a spirit of buoyant and courageous optimism.

II. JOHN R. KIRK, PRESIDENT, STATE NORMAL SCHOOL, KIRKSVILLE, MO.

The question is a practical one. Some of its implications seem unsound. Its full and fair treatment includes consideration of the conditions and purposes of both the high school and the normal school.

High-school conditions are critical and unsettled. The high school feels keenly the needs of community life on the one hand, and painfully the aggressive interference of higher institutions on the other.

Instruction in the elementary schools is better organized and more efficient than in the high schools. Supervision of elementary schools is far-reaching, efficient, and sympathetic. The high school is viewed from afar and criticized and hectored by fault-finders, novices, and self-appointed

superficial judges. It is neglected by public-school superintendents and by them turned over to the manipulation of inspectors, visitors, and accrediting committees.

Inspectors and committees superficially measure the high school by the number of its degree-holding teachers, and the investment in buildings, apparatus, and appliances.

The high schools have grown remarkably and unavoidably because they have been pushed upward and forced to grow, not by committees and inspectors, but rather by the inrushing masses from the elementary schools. Universal education gradually expands into secondary and higher education. Our fathers builded wiser than they knew. They set the age limit from five to twenty-one for common-school education, meaning little more than elementary education which children readily finish now by the age of fourteen or fifteen. The children can carry high-school studies from four to six years farther and graduate from the most extended high-school course by the age of nineteen. Natural forces, therefore, have in the main produced the great expansion of the high schools. But the instruction in the high schools has been determined by other causes.

This paper seeks to recall simple facts. It casts no opprobrium upon anyone. Nobody's motives are impugned. No super-sensitive persons should rise up and accept an undue share of responsibility for conditions or make any charges of muckraking.

We have approached uncomfortably near the control of the public high school by a coalition of higher educational institutions. This coalition unwisely goes even farther: It aggressively reaches over and seeks control of the normal-school curriculum and declares the limits beyond which the normal school should not go, and the narrow channels in which the normal school should run. It would confine the normal schools to such a circumscribed curriculum that their graduates could never become highly efficient teachers for schools of any kind. It would make of them, at the best, but schools for "training" high-school graduates about two years, in mechanical routine, with a view to their becoming elementary teachers by imitation and drill.

Responsibility for the best improvements in high schools belongs to the public-school men and patrons. The gradual transformation of the high-school curriculum has come thru receding and yielding by higher institutions and the insistent demands of high-school teachers, patrons, business men, and the general public.

For a long time the chief content of the high-school course was mathematics, dead languages, and belles lettres, with a little of modern languages. Popular demand forced an increase in modern languages. Laboratory science was fought for long and hard. Last among the sciences comes agriculture, which, even in the Middle West, the higher institutions reluctantly recognize in response to public demands. Little by little the will of the

people prevails and manual training is recognized. Now come home economics, art, music, and physical education.

Facts show the trend of community sentiment and the obstacles met and overcome.

Some high-school men, thoughtful, watchful, and earnest, feel and resent external domination; some oppose and struggle against it; some, in doubt, hesitate; some yield hopelessly to the inspectors and committees; some acknowledge frankly that they have no real share in determining the details of the high-school régime.

But the high-school men have studied their own problems and know far better than any others just how to control, provide for, and stimulate the high-school children to the development of the best that is in them. Hundreds of these men, from their own election, live their lives in the high schools. They have definite conceptions, desires, and sympathies. They live in a concrete and real world. They see the gross bungling by recent graduates forced into the high-school teaching corps without regard to efficiency in teaching skill, but solely by the support of well-intentioned yet unwise committees and inspectors. Again, the textbooks for high schools are in large measure prepared by college men, who organize the textbook content from their own large intelligence, individual study, and judgment, on the basis of logical arrangement without regard for the psychological, personal, and social characteristics of the high-school student or the apperceiving bodies of knowledge in the mind of such student.

We are reminded that these college men once taught in high schools. The investigation shows large numbers of colleges graduates to have had brief and unsatisfactory careers in high-school teaching, to have declared their dissatisfaction with high-school conditions and opportunities, to have returned to graduate study, to have worked their way into tutorships and ultimately into professorships, where a part of them engage in dictating to the high schools how things shall be done which they themselves couldn't do very well. The careers of a few of these men have been studied.

Here is an illustration: Two ambitious and well-known inspectors were, prior to their inspectorships, peripatetic high-school teachers, principals, or superintendents, moving from school to school biennially, without their own consent. These men, and some others among the most persistent in dictating what the high schools shall do, did not remain long enough in any one position thoroly to understand and appreciate the high school in community life. These men are scholarly, honest, and forceful men, but how can anyone believe that men of this type can understand the high schools as well as the men that are living their whole efficient lives in the high schools?

Our condition is to some extent primitive. The facts can scarcely be stated without somebody becoming offended. It would seem, however,

that the Council of the National Education Association should be able to consider the facts and to support some form of clean-cut educational democracy in lieu of the belated monarchism that worries us.

Men and women of ability, scholarly attainments, rich experience, and active sympathies, living for and in the high schools; men and women with skill and efficiency in instruction and control who have faithfully for many years devoted their full energies to the high schools—these people in an honest democracy should have the authority and the responsibility of determining more than all others just what shall be done in the high schools.

Yet tradition, voluntary coalition, and increasing centralization of higher institutions present obstacles which make it very difficult for democracy in high-school education to prevail.

Therefore, in the interest of a "square deal," I believe that all the representatives of higher education and of technical and professional education now having their hands on the high school, should take their hands off, disband their committees, and concede to the high schools the freedom without which high efficiency is impossible. I believe that all those now in higher education and in technical and professional education who have not their hands already on the high schools should keep their hands off.

There is one permanent, safe, logical, fundamental principle of democracy in education applying to this question: It is that the high school should be organized and conducted solely with a view to such instruction in the high school as is best adapted at each passing moment to the development of the adolescent high-school child most naturally and economically into a somewhat higher and more efficient mental, physical, and moral condition. The high school should be so conducted that the largest possible number of children of high-school age will desire to enter the high school and remain in it until they have exhausted such of its resources as may be helpful to them. The instruction should be so gauged as to exercise in the highest degree and stimulate to the greatest extent the best native and acquired capabilities of each and every high-school girl and boy.

But these things are impossible unless the high-school children can be free from the handicap of external interference by institutions and by individuals. There is a tendency in higher education so to standardize and classify our institutions as to produce some such caste as characterizes education in European countries. There is a disposition to classify the high-school students prematurely, so that some, without financial means or social standing, will be coached and "trained" and specialized in the high school with a view to entering some low-grade, alleged normal school or city "training" school, and in the shortest possible time secure the reviewing and "training" and mental padding sufficient to make of them teachers for the masses in the elementary schools.

This standardizing scheme pushes certain other high-school graduates, whose parents have money, in the direction of universities, where in four or five years of coaching and "training" and specializing, they may become specialists in high-school teaching or in some other specialized vocation. But premature specialization ignores the natural and wholesome differentiation which should be allowed to take place in the last few months of the high-school course or even later. The high-school student needs time to be tried in a variety of rather elementary studies and exercises. He and his parents and his teachers have little conception of what he can best do. He doesn't know himself and isn't very well known by his teachers or his parents.

The abnormally early differentiation and specialization of our high-school students is largely influenced by a vicious doctrine creeping into American education, to the effect that a half-educated person, trained and drilled in recipes and prescriptions and mechanical methods, and representing perhaps graduation from a short-cut mechanical "training" school, will do very well as a teacher of the children up to and including the last day in the eighth grade, while a fully educated person, such as a university graduate is supposed to be, must be secured to teach the children from and after their first day in the high school.

Investigation as to what the half-educated teachers can do in schools of any kind, as compared with the work of fully educated teachers, reveals unmistakably the unsoundness of this creed. It is discovered that if any person with brief and narrow preparation can be endured as a teacher, it is the one who teaches mathematics or a foreign language in a secondary school or college. If any teacher anywhere needs the incisive mental virility supposedly acquired in a college education and along with it an abundance of professional skill and ability, it is the person who is permitted to enjoy the rare privilege of teaching in an elementary school.

The two years' "training course" in normal schools should be abolished. Such "training courses" and most of the "city training schools" are agencies to arrest the development of young life. They are machines to prepare round pegs for round holes and square pegs for square holes. Each peg is useless, excepting for the hole it is made to fit.

I believe some high-grade normal schools of the Middle West represent the best possible attitude as to the relation between high schools and technical and professional institutions, and also the attitude which normal schools should assume toward all education. I believe these normal schools typify the earlier stages of the ultimate scheme for the preparation of teachers of all kinds and grades. Such normal schools encourage very large freedom in the high schools. They comfortably ignore the trend given the high-school students while in the high school. They welcome most of all the alert, eager, versatile, inquisitive, purposeful, industrious high-school graduate who has learned to work with a will at the things that come next.

Such normal schools are not at all satisfied with mere "training" courses in the doctrines and processes of teaching. They have discovered that a good teacher of any kind cannot be made out of a typical high-school graduate in the short period of two years. They have discovered that for the present the minimum time in which to transform a high-school graduate into a reasonably good teacher of any kind is three school years. They have discovered not only the utility, but the necessity of intermixing intensive academic studies of college rank with pedagogic studies. They can't even trust the good college-union colleges to produce the type of mental virility in history, or literature, or mathematics, or science that is necessary in a thoroly efficient, independent, resourceful teacher in the high-school grades or in elementary-school grades. Much less can the academic attainments obtained in any kind of a high school now existing be accepted as the basis for pedagogical instruction. The efficient and free normal school guards constantly against the implications which are contained in the term "training." It is probable that the earlier masters in education used the term "training" with greater caution and with more limitations than men in university circles now do. It is the well-settled practice of the best normal schools of the Middle West to devote nearly two-thirds of the student energy to academic studies of college rank, and but little more than one-third of the student energy to definite professional work and study. It is believed that the necessity for the policy of these schools is well demonstrated. These normal schools will take care of themselves.

The efficient normal school is in no sense a college, tho it is of college rank. It may include everything that a college can possibly do. It may set the pace for the college in some things that a college ought to do. It is a new force necessitated by new conditions. It is unlike any other agency in our democratic scheme of education. Some illustrations make matters clear: The normal-school student may take college algebra and analytics to refresh his mind and sharpen his wits and to increase his power of mental concentration and to make easy and simple all the processes in elementary and high-school mathematics. Then in the concrete pedagogy of mathematics which every good normal school gives, the intensified knowledge and keenness of mind enable the student to deal readily with the concrete phases of all elementary mathematics and with ready skill to apperceive, utilize, and for himself organize under the stimulus of skilled associates and supervisors, his own effective ways of teaching and illustrating elementary mathematics down to the easiest lessons in the lowest grades where any mathematics shall be taught.

As bearing distinctly upon our question: one high-grade and very practical normal school has, during the past decade, kept itself in very close touch with the rural and village schools. Members of its faculty every week in the year spend some portion of their time in public schools.

Several hundred high-school graduates of various kinds have been followed thru this normal school to graduation. It is discovered that the graduates of the smaller and apparently more neglected high schools thruout a territory a hundred and fifty by two hundred miles almost uniformly lead and surpass the graduates of those larger high schools where the ideas and rulings of inspectors and accrediting committees are closely followed.

A variety of reasons may be discovered for the almost uniform superiority of the graduates from the small and isolated and neglected high schools. But there is not much of consolation in the results discovered for those reactionaries in education who adhere to the doctrine of official inspection and the selection of teachers thru committees and officials of the higher institutions.

The high-grade normal school of the Middle West deals with a concrete and real situation. All it asks of the incoming student is an alert and receptive and quickly acting mentality. Its doctrine is to produce students and teachers with initiative and constructive ingenuity, who are not very imitative, who think little about a method taught them, but who acquire readily the habit of adaptation, of looking into the mind and character of the children to be taught, of having regard for the background in the consciousness of the children, and for the apperceiving bodies of knowledge in the minds of the children, and for all the habits of action which the children have acquired.

The conclusion of this paper is that the professional school for the preparation of teachers should have little concern as to the curriculum of the high-school student; that no one else understands the high school so well as the principals and teachers who are living their lives in the high schools; that it is better for the high-school children and better for the normal school and better for all education that the high-school graduate who is to enter the normal school shall do so unbiased by the interfering preconceptions of anyone. It is enough that such high-school graduate shall be a virile, eager, anxious, inquisitive, curious-minded individual, who comes like the undamaged film in the camera, ready for impressions and accustomed to reaction in view of the impressions and the situation.

DISCUSSION

J. H. Phillips, superintendent of schools, Birmingham, Ala.—It is fortunate, perhaps, that the excellent papers just read have left the topic sufficiently vague and indefinite for ample discussion. They have not attempted positive conclusions. This would be dangerous at a time when the curricula and methods of our schools are undergoing transition. I prefer to avoid hasty and dogmatic determinations and to let our curricula remain fluent and adaptable to the demands of local conditions.

It is assumed that candidates for the normal school should receive a high-school course that should be, in some specific ways, different from the course of study provided for others. This, of course, is a mere assumption. It is still a debatable question whether the course for the normal-school candidate should not be a broad foundation,

strong enough to bear the weight and responsibilities of a normal course, a technical school course, a university course, or the work of practical life. The increasing tendency to differentiation in our secondary curriculum certainly increases the complexity of the problem confronting our smaller high schools.

Besides, the difficulty of determining in the secondary stage the future career of a pupil is not easily solved. No teacher is endowed with sufficient wisdom and foresight to justify the assumption of divine prerogatives and "before the foundations of the world"—as far as the child is concerned—to foreordain some pupils for college or university, some for the normal school, and some for the work of life without further preparation. Serious life disappointments are too often the results of unwise and premature decisions. For those whose time and opportunities are limited, it is agreed that the high-school course should be so adjusted as to meet the needs of practical life, but the scholastic requirements of those who contemplate teaching should be as rigidly insisted upon as the demands of the college or university.

Candidates for positions as teachers in elementary schools, as a rule, are required, or should be required, to have a four-year high-school course or its equivalent, plus two years of training in a normal school. It would seem that this should be the minimum requirement. Two years in college should be accepted as an equivalent for the normal school course, provided such course embraces education. For high-school work, it is recognized generally, I believe, that college graduation or its equivalent should be required as a minimum condition of eligibility. In some cities that are favorably situated with regard to university privileges, university graduation or its equivalent, including a course in education, is required already as a condition of eligibility in applicants for positions as teachers in the elementary schools. While this is admittedly exceptional, it is nevertheless a desirable and a growing tendency. In some states that are blest with normal schools, the trouble now is to get normal-school graduates who are equal in proficiency to the graduates of the high schools, when at least two years of normal-school work, superimposed upon a four-year high-school course, is sought as the immediate ideal. Too many of our normal schools admit pupils from the elementary school and turn them out as teachers believing that they are prepared for work in any school, elementary or secondary, a year or two before they could possibly complete any regular course in a good high school. This is admittedly wrong, demoralizing, and disorganizing. To perform its function in our system of education, the normal school must first of all recognize a good high-school standard, and should require for graduation, at least, a course of two years beyond the high-school standard for graduation.

Moreover, we need a greater degree of co-ordination between the work of the normal school and that of the college. A student leaving the high school desires to go to college, but has not the means to complete a college course. He hesitates about going to the normal school because the two years' work in the normal school will not be credited for a degree in the university. If the graduate from the normal school finds that after a few years of teaching, he can enter the university and receive credit for his two years' work, many would enter the normal school with university graduation as an ideal. As a result, both our elementary and secondary schools would be the beneficiaries. The graduate of the normal school should be able to complete a college course in two years, if the normal school and the college are so correlated that waste and lost motion are prevented. Besides, the university graduate, entering as a teacher in the elementary school, should be credited in the salary schedule with his two years of university work, just the same as two years of actual experience in teaching.

Upon the assumption that the candidate for normal-school entrance while in the high school has no idea of completing a college course, I may concur in the sentiment that certain studies should be emphasized in the high-school curriculum. The subject of English should unquestionably be magnified; stress should be laid upon biology in its more practical phases and applications; a strong course in history should be required,

and social science, including practical hygiene and sanitation, should receive more than incidental and theoretical treatment. These topics should be fundamental for the student who contemplates entrance into the profession of teaching thru the avenue of the normal school. Admitting this, the question still arises, Are not these subjects equally important for the pupil who expects to enter college, or the counting-room? Are they not as vital and essential as elements of training for domestic, industrial, social, and civic life as they are for the life of the teacher?

There is danger today that the high school shall attempt too much differentiation and over-much classification in response to the insistent demands, on the one hand, of diverse trades and occupations. On the other hand, there is danger in heeding the too persistent requirements of institutional interests. Unchecked differentiation in our high-school courses of study, to meet the immediate and simultaneous demands of the normal school, the college, the technical school, the counting-room, and the shop, will have a tendency to make of our high-school courses meager and attenuated foundations for human lives that shall be proportionally narrow and contracted.

We must not forget that the average pupil in the high school is an unknown quantity; he is unknown to himself, to his parents, to his teachers. It is the chief business of the high school to enable him to discover himself, his tastes, his capacities, his possibilities. To this end, his course of study and his school activities should be adjusted and directed, and above all, energized by the spirit of the teacher.

Mrs. James M. Greenwood, Kansas City, Mo.—That I should know anything about the high-school preparation of candidates for normal-school training is a violent presumption upon the part of our good-natured president. At least this must have been the thought of the member of this Council who asked me what in the world I knew about normal schools!

After the principal of the normal school with his expanding ideals, "his intellectual and spiritual fullness that is so easily recognized"—after the lecturer, after the psychologist, after the dean of the training school, the dean of the educational theory and philosophy, the critic teachers—after all these have done their best, and have sent the product of their multiplied efforts out into the world, then comes one who, in a most significant and vital way deals with this product—one who can truly say "by their fruits ye shall know them." For twenty years I had but one chief diversion in pedagogical experience: to analyze, to dissect, to classify, and to create in willing young minds an insight into teaching, so that young high-school graduates could do some work. If there is anyone who knows the value of trained teachers by whatever process, it is a principal of a grammar school. I have had the high-school graduates before taking normal training and after taking normal training—I know them by comparison and by contrast.

The situation as regards the teaching force of Kansas City is similar to that of many other rapidly growing cities. The demand for teachers is constant. We employ as many experienced teachers from the outside as are attracted to us by the salary offered. In the Kansas City field are many teachers of superior ability. But we have the contingent, increasing each year, that has graduated from the city high schools, passed the teacher's examination, substituted one year, and received temporary appointment as teachers. During the period of substituting, these beginners have learned a few devices. They are almost helpless if left to themselves. They have little knowledge of children and little knowledge of the subjects to be taught. They belong to no school of thought, they know nothing of the philosophy of education, or of its history, or of its principles, or of its practice. They begin substituting at a small salary and are put in charge of a room. They have youth and personal charm, and what may be termed flexibility of character; they are enthusiastic and eager to succeed. Their personality tides them over the period of their novitiate and if they remain in the service, they sometimes become valuable members of it. But what of the interim that elapses before they become

valuable? What of the undisciplined rooms, the indefinite teaching, the wasted energy upon non-essentials, the pupils standing idle in cloak rooms and halls, the unmotivated monotony of routine, the habits of mental indolence fostered, the letting-down of standards? I know these high-school graduates well—and rejoice to see them enter any course of training.

At the National Education Association meetings of 1908 and 1909 there was much discussion of the problems of normal schools, this discussion ranging from problems found in every normal school to conditions highly ideal. Probably further consideration is thought advisable because of the difference of opinion still existing as to the function of the normal school. Without side-tracking to the discussion we all agree that a normal school is what it is: its "isness" is determined by its capacity, by its faculty, and by its ability to place its product. We say its field of influence is the state, but it often goes far beyond the state.

It is obvious that a normal-school training can only rest secure on a firm foundation, to wit: *preparedness*. Upon entering the normal its students should be fitted to do work beyond high-school grade.

"Personal culture equivalent to a four years' course in high school" may mean little or much. The question is: Does the high-school graduate bring to the normal the requisite preparation? He may and he may not. The modern high school deservedly stands high in the opinion of educators—yet many graduates of the modern high school (even those having in view the profession of teaching), owing to hereditary influences, or environment, or mental indolence natural or acquired, or to the great number of electives, or to being taught by young persons fresh from college or university—owing to some cause not easily determined, have a frivolous, indefinite, scattered habit of thought which, tho possibly advantageous as a preparation for the ordinary activities of life, is very detrimental to one in training for a teacher where disciplinary concentration is a necessity. A sovereign need in preparedness for normal-school training is the habit of correct expression due to the ability to center thought, in teaching and in administration a teacher's ability depends upon his power of concentration.

Yet the high-school graduate manifests a wild delirium of *ideas* which seem to run over each other. This does not constitute preparedness. It is, in my opinion, a weak spot for the high school or the normal school to overcome. This is not meant as a complaint. The poor, i.e., the receptive thought, we have always with us. In correcting this situation the pedagogical expert will find here a field of opportunity.

Jacob A. Shawan, superintendent of schools, Columbus, Ohio.—In considering the qualifications necessary to enter a normal school, one must take into account the essential elements of a good teacher—these are personality, scholarship, and training. Under personality would exist those natural elements which constitute the born teacher, hopefulness, cheerfulness, tact, and love. "As is the teacher, so is the school." A gloomy temperament never wins or helps the child. Closely allied to personality is physical strength and power of endurance. Without health, cheerfulness, vivacity, and enthusiasm are practically impossible. First of all, then, personality and good health should be considered in the preparation of the teacher, and hence for entrance into the normal school.

A good strong four-year high-school course should be required. In preparing to enter the normal school, certain high-school subjects should be required; such as:

A four-year language course, preferably Latin.

A complete course in algebra and geometry; physics and botany, in science; music and drawing.

On the cultural side, a full course in history, English, and literature is absolutely essential to a good teacher.

It is a rule in our own city to require an average standing of not less than 85 per cent thruout the four-year high-school course. Those who come from other high schools

than our own must present credentials and give evidence that good preparation has been made in a preparatory school. A full equivalent of a strong four-year high-school course is required.

In these days of educational opportunity there is little reason for admitting anyone to the normal school, the gateway to the teaching profession, who does not have the personality and the academic preparation to take the training required.

HOMER H. SEERLEY, president of Iowa State Teachers College, Cedar Falls, Iowa.—In the state of Iowa the relations of colleges and secondary schools are in the control of the State Board of Education, whose special function is the supervisory management of the State University, the State College of Agriculture and Mechanic Arts, and the State Teachers College. On account of this legal authority, the entrance conditions to these higher educational institutions are uniform and the inspection and accrediting high schools is under the control of an officer of this board called the inspector of secondary schools. Assisting this officer is a secondary school board composed of the examiners of these three educational institutions, which persons represent the varied interests and make reports to the board as well as to the several institutions. In many respects this state inspector is better than an inspector appointed by any one of the institutions, as he represents a broader constituency and seeks the improvement of the high school more than to act as an agent to solicit attendance of high-school graduates at the institution where he is a recognized member of the faculty.

So far as two years' experience with this system can determine, the plan works well. It gives the high schools a hearing that they much appreciate and it has broadened the scope of their courses of study so that modern subjects are permitted to form a part of the requirements that are accepted for Freshman entrance. At the same time, whenever the high schools desire modification or readjustment they are able to secure official attention. With such a plan the colleges are required to accept a graduate's qualifications, if his high school is accredited, and also to adapt the courses of study they offer students to the conditions that universally exist. The normal schools are thus able to rely upon a reasonable uniformity of preparation and they can so plan their courses that each student can have abundant opportunity to prepare for some special line of teaching in the most reasonable time. This will lead to the presentation of all kinds of teacher preparation and training and give the normal school a real and potent place in the educational system that is often absent.

The fact is that the normal schools must become co-operating institutions that are related to the high schools on the one hand and to the universities on the other hand, so that they have the recognition which their mission and their opportunities should confer.

J. STANLEY BROWN, principal of high school, Joliet, Ill.—This subject involves chiefly the answer to three questions:

1. When do high-school pupils determine that they are going to attend a normal school for the purpose of preparing to teach?
2. What do they expect to teach after receiving such training?
3. In what kind of school do they expect to teach—grade school, high school, normal school, or college?

Until these questions can be fairly answered at the beginning of the high-school course, it will be impossible to give the training which may be agreed upon as best suited to the needs of the individual student.

Every high-school principal knows that even with all the assistance that may be given to the high-school Freshman, what he is going to do after he completes his high-school course is largely a matter of conjecture. Indeed, it is a well-known fact, that even in the best high schools, not more than 50 per cent of those who enter, graduate, and of those who say at the beginning of their school course that they are looking forward to teaching, probably half either drop out of the high school before they have graduated

or change their minds and decide to do something else. But granted that the student knows upon entering high school that he is going to teach, yet does not know what he expects to teach, the difficulty of determining what his course shall be in high school is still a puzzle, because we are coming to believe now that specialization with reference to vocational training and with reference to professional work may legitimately begin in the middle of the high-school course.

So it seems to us, that it is both difficult and unwise to assign the same work in high school to a young man who expects to teach manual training in the grade school, and a young woman who expects to teach kindergarten, or the same work to a young woman who expects to teach domestic science either in the grade or high school, and to a young man who expects to be a village principal.

Again, the course of study certainly ought to be modified to some extent for these young men or young women, some of whom expect to teach in the grade school, others in the high school, and still others in the college. For those who are looking forward to teaching in the grade school, the course of study ought to be extensive; for those who are preparing to teach in high school or normal school, the course of study ought to be both extensive and intensive, and for those expecting to teach in college, the course of study should be somewhat intensive.

Since the difficulties involved in the ideal answer to these three questions are under our present system very great, we shall probably continue to receive in our normal schools, the graduates of four-year high schools and adjust the preparation to the conditions which then present themselves.

NEEDED ADJUSTMENT BETWEEN SECONDARY SCHOOLS AND COLLEGES

I. ROBERT J. ALEY, PRESIDENT OF THE UNIVERSITY OF MAINE, ORONO, ME.

In order to consider this question adequately, it is necessary to keep in mind four important factors: the college, the secondary school, the community, and the individual. Any attempt at adjustment that leaves out even one of these factors can be neither satisfactory nor permanent. The traditional order of the factors places the college first. It is probable that this order will soon be reversed. However, for the purpose of discussion it will be maintained in this paper.

The origin and development of the college course is so well known that it is unnecessary to review it at this time. We should, however, remember that the old college course was limited to a few subjects which were studied continuously thru a number of years. Most of these subjects had been begun in the preparatory school. We should also remember that the college as an institution has been very conservative and very strong in its opposition to change. New and modern subjects of study have had to fight for recognition. Altho much of the older conservatism has given way, traces of it still remain. In many institutions the A.B. degree is considered superior, even tho some other degree requires more work. Quite a number of entrance points are required upon which no college work depends.

In the earlier days of the college but few requirements were made for entrance. Boys were prepared to pass the entrance examination by the

minister or by some individual who devoted himself to private instruction. As the facilities for preparation increased, the requirements of the college expanded in order that its own work might be more advanced. About the church or the home of the private instructor there gradually grew up schools devoted to the preparation of boys for college. In order to meet its own peculiar requirements, the college sometimes established a fitting-school of its own, or became the patron of some private or church-established preparatory school.

The high school, supported by the public, is of recent development. In its origin it patterned after preparatory schools or the private academy. Its course of study and spirit were in harmony with the entrance requirements of some one or several colleges. Within the last twenty-five years, and more especially within the last dozen years, the public high school has had a remarkable growth. No phase of public education has shown more vigor, and no period of school life has received more careful thought from intelligent men. With its splendidly trained teachers and its great band of enthusiastic students, it is now an educational force that must be reckoned with. For it the day of dictation from the outside is about over.

The growth of the high school and its importance as a factor in human development, have aroused great community interest. The cost of high-school education is great enough to attract the attention of the taxpayer. The increased complexity of community life and the keen competition in all lines of activity, have made apparent to all the need of more intelligent and better-trained citizens. Students of the high school have not been slow to see how important it is that the institution serve the community more and better than it has in the past. Long ago, by common consent, we agreed that an elementary education for all was necessary to preserve the community itself. We are now rapidly approaching a time when it will be the common belief that four years of study beyond the common school is just as necessary for the best interests of all. The common consensus of necessary knowledge today is certainly four years in advance of the requirements of our grandfather's time. If the high school is to meet present needs, it must contribute the knowledge and power that the student will find of direct value in his life-work. This program does not call for a complete change of curriculum. Much of the old and established knowledge will always be needed. The obsolete and useless should be eliminated so that time may be found to give each student the equipment demanded by the life of the present.

Within the last decade the individual has assumed an importance never before recognized. We are coming to believe that each one must have the opportunity to develop himself to the utmost. The powers and tendencies of two individuals were never exactly alike and they can never be made alike. The educational effort that is successful must recognize these individual differences and must give to each individual such attention as is

necessary to make him realize his possibilities. The growing importance of the individual has had much to do in enlarging and diversifying the course of study in our high schools and colleges. Doubtless most of the future changes will be made in order to guarantee better care of the individual.

From the past we have inherited the notion that subjects of study differ greatly in value. There are subjects which are supposed to contribute to scholarship. There are others that give mere knowledge or skill. We seem to forget that the great men of the past whose writings are now supposed to be the real sources of scholarship never took the time, possibly never had had the opportunity, to know many things which we now deem necessary. Our modern experience proves conclusively that there is no great difference in the value of subjects of study. Any subject really worthy of study, if pursued long enough, will give power and culture. No subject can give either of these results if studied but for a short time. It is unfair to compare the results of the study of Latin or Greek for six or eight years with the results derived from the study of a modern language or science for a few months. Time and continuous effort are elements that must not be omitted in making a comparison of values.

The college, proud of its long and splendid history and steeped with the conservatism that often comes with age, has looked upon its work as quite independent of the great stream of education. The high school, receiving its support directly from the people, knows that its life depends upon a greater service to the community and the individual. These two educational agencies have a good many points of difference that should be adjusted. A few of the more important ones are these:

1. The high school needs greater freedom in the solution of its own problems.
2. The college should require fewer specific subjects for entrance.
3. The college should arrange its curriculum so that within its walls all subjects of study may be begun.
4. The college should enlarge its range of entrance subjects and lay greater stress upon quality and power.
5. The certificate system of admission to college should be greatly extended.

No phase of education can be entirely independent of other phases. Those giving their time exclusively to one phase of education are not thereby qualified as experts in any other. The greatest handicap under which the high school has developed has been the pressure from the college to determine its methods and fix its course. The college with its own purpose in view, and knowing exactly what it wanted of the student who should enter its doors, has felt privileged to determine to a considerable degree of detail the work of the high school. No adjustment of present differences can be made until the high school itself is given very great freedom to determine its methods, its courses, and its field of activity. The high schools are ready to assume such responsibility. The teachers in these schools have been educated in the colleges and universities. They are

intelligent, well-prepared, thoughtful college men. They have recently turned their attention to the problems of their own work. If they are given freedom to work out the answers to their problems, one need have no doubt as to the final outcome. Such freedom will make the high school a better institution. It will make it evident to the taxpayer that it is worth all it costs, because it will contribute to the needs of the community in which it exists and because of the opportunities it will give for individual development. Such a high school will build upon the foundation laid by the grades, will make its work fit existing conditions, and will produce the power needed for successful college work.

It is the dream of almost every American parent that his son or daughter shall go to college. It is a fact that conditions are such that only a very small percentage of these dreams are realized. The dream itself, however, has great influence upon the selection of studies in the high school. So long as the specific requirements of the colleges are so numerous as they are now, the prestige of the college-entrance course will induce many boys and girls to undertake studies for which they have no ability or for which they are at the time too immature. A reduction in the number of specific requirements would enlarge the freedom of the high school and make it possible to meet more perfectly the needs of the individual and to keep a larger number to the end of the course. Many concrete examples show that the college does not suffer when specific requirements are reduced.

Originally, certain subjects were required for entrance to college, because in the college these subjects were to be continued by all students. The entering student needed to know Latin, Greek, and mathematics in order that these subjects might be carried on in college from just where they left off in the preparatory school. Today there are in most colleges but three subjects left that require specific preparation. These subjects are English, mathematics, and Latin. If Latin and mathematics were begun in college, there would be no need of specific entrance requirements, except in English. This requirement seems necessary in order to insure familiarity with the mother-tongue. It is difficult to see why it is any more undignified for a college to teach elementary algebra and geometry than it is to give the first lessons in physics or chemistry. It is equally difficult to see why any greater harm would come from beginning the study of Latin than now comes from beginning the study of French, German, Greek, and Hebrew. The beginning of all subjects of study in the college would open the college door to many who would profit much by the opportunity.

The range of entrance subjects has been greatly increased in recent years. The increase, however, has not kept pace with the introduction of new subjects into the high school. The list of entrance subjects should be as comprehensive as the course of the high school, subject to the conditions that no course in the high school should be shorter than one year, that the teaching should be of high grade and that the subject-matter itself

should be well organized. The college allows a student a wide choice of subjects after he enters. Why not allow him greater freedom in presenting points for entrance? Whatever one is to do in life he needs the discipline that comes from long study of a few things. The high school should not place its stamp upon a student, nor should the college open its doors to him, unless he has pursued successfully the study of at least two subjects for not less than two years each.

In the common schools a pupil passes easily and naturally from one grade to another. The teacher of each grade must trust to the honor of the teacher of the preceding grade for the quality of the students sent up to him. No good system of schools would allow the teacher of the fifth grade to determine how many fourth-grade pupils should be promoted to the fifth grade. The eighth-grade teacher certifies those who are ready for the high school. There was a time when the secondary school held entrance examinations. It did this, perhaps, under the mistaken notion that because its own product was not accepted, it could in a way get even by refusing to accept the product of the school below it. Today the high school practically everywhere accepts students by certificate from the grades. In a good system of schools it is as easy for a boy to step from the eighth grade into the high school as it is for him to pass from the seventh grade to the eighth. The high school has not suffered because of this arrangement. Indeed, it seems that one of the elements contributing to its rapid growth has been its adjustment to, and recognition of, the school below it. In many states the relation between the state colleges and the high schools is almost as close as that between the high school and the grades.

General certification of high schools is desirable for many reasons, but especially because it will make the relation between the high school and the college intimate and easy. General certification is already completely established in a few states, and has assumed large proportions in others. There are but two large barriers in the way of its complete adoption—the lack of agreement as to the definition of a high school, and the tradition of the old and privately endowed institutions.

There is already general agreement that the high-school course should be four years in extent, that a high-school unit should consist of daily work in one subject thruout one year, that every student should take at least three units in English, and that the completion of fifteen units should be required for graduation. There ought to be general agreement that no credit for less than one unit should be counted toward graduation. Foreign language, mathematics, science, and history are so well grounded as subjects of study, and so intimately connected with life's activities, that every high school ought to give an opportunity for at least three units in each. These subjects and English should constitute what the colleges would recognize as majors. The requirements for graduation should include two majors of three units each, one of which should be English, and one other

major of two units. This gives considerable freedom in the selection of majors and perfect freedom in the selection of seven units. Under such a plan the high school could serve well the individual, the community, and the college. The graduate of such a course would be fitted to be a wage-earner or to do successful work as a Freshman in college.

State universities and a few privately endowed institutions will not offer serious opposition to such a program as has been outlined. The real opposition will come from those institutions in which the traditions of the past are strong and in which responsibility to the public is not direct. The public high school is now so strong and so well entrenched in public esteem that it can afford to ignore much of the opposition of the college. That it will do this, and that the college will ultimately be compelled to accept its graduates, no one conversant with the present educational trend doubts.

II. G. W. A. LUCKEY, HEAD PROFESSOR OF EDUCATION, UNIVERSITY OF NEBRASKA, LINCOLN, NEBR.

If I am to add anything worth while to the message of the morning it is because my thought and experiences shall help you in some way to see more clearly the problem that confronts us.

We have reached a stage in development wherein we are beginning to realize that something is wrong with the machinery. It does not ring true. The gearing needs adjustment. There is danger of explosion and loss of life. The wastes are already known to be enormous.

It is much easier to discover wrong than to right it. But the teacher must do both. I am speaking to a body of experts most of whom have given the problem long and earnest consideration. Together we ought to be able to make some suggestions that will have lasting value. A clear statement of the problem is the first step toward its solution.

The fundamental problem which we have to solve is the meaning, purpose, and development of life. Our topic covers but a small part of a larger and deeper subject. Unless we are able to see in perspective we cannot hope to give the true solution to any phase of this greater subject. As seen in organic evolution, at least in the earlier stages, life is naturally progressive, changing with growth from lower to higher forms. This does not exclude the possibility of retrogression and is, I think, equally true whether we consider growth in plants, in animals, or in man. So far as is known life exists only in and thru an environment, and takes on, or changes with, the features of that environment. We speak of this force as the law of adaptation, and note its workings thru the laws of variation and natural selection. Man, by taking advantage of these laws, has been able to adapt plants and animals more quickly to his needs. But these are the laws of life and affect men the same as they do plants and animals. Hence we must have them in mind when we come to consider what shall be the treatment of the boy and girl in any part of development.

When we come to the solution of these problems we do not differ so much as our words seem to indicate. What we have in common is far greater than what we have that is different. Our submerged self is many times greater than that which is seen. Language is a late development and may or may not touch the soul vitally. When we really see the deeper truth that is within us we are not far apart, however crudely we express it.

Life is a great spiritual force which man is able to take hold of, use, and by a sort of mutual interaction, adapt to his needs. Thru the working of this force man is brought into relation with the whole plant and animal kingdom. He is subject to the same physical laws. Knowledge pertaining to the one field will be helpful in the other. It is this unity of life-forces that one must see in order to adjust the parts to the whole.

It is not easy to give a satisfactory definition of education. It covers such an extensive field. We are apt to think of education as both static and dynamic—as a product and a process. In the first instance, it is the gathering and the transmitting of knowledge; in the second, it is a matter of progressive adjustment, of individual development—a feeding of the soul. In the latter sense, education is the giving of form, efficiency, and initiative (a dynamic action-system), to an organism or group of organisms when they are growing.

Whatever our concept of education I believe we agree that all true education is individualistic—a growth or development from within out. To awaken the individual consciousness and to teach individuals to see and to live aright is the chief purpose of education. This thought must lie at the bottom of all true instruction. True teaching always deals with universals. The material of education is always past experience—something that has been, not necessarily what is, or is to be. The material is always accumulating and soon becomes too great to be acquired by any one mind. Besides its acquisition may tend to draw us away from the present and separate us from real life. Each teacher is apt to feel that what he has experienced is all-important.

At birth the child is possessed of life and certain inherent qualities; what more he takes on must come thru his environment. This is also true, in a more limited sense, of the plant. Nature gives it roots for purposes of growth. Man has special organs. When the roots are injured or destroyed new ones take their places, not so with the special senses.

In the education of the people there are two things we can trust—in the physical world the laws of nature, in the spiritual world the common sense of the people—social consciousness. We can never get far away in our character-building from public opinion. Neither can the high school become far removed from the interests of the community and live.

No one can truly teach what he does not live. In language, in history, in art, in science, we can teach the past only by living it again in the present. In the race as in the individual there are psychological moments

or inspirational periods when life seems richer and truer than at other times. Such periods in the civilization are the ones we desire to store in memory and to live again in thought and action. These are the culture periods that furnish us with the best product of our civilization and inspire us to noble needs. But in order that this material shall be of any value it must touch the soul and become reincarnate. No amount of memorizing and restating unappreciated facts will aid one to see, appreciate, and live the best life of the twentieth century.

The children of today are the rulers of tomorrow. Today they are in our keeping but tomorrow we shall be in theirs. It matters little whether it is my subject or yours that is found to be of waning value. The trust is too great to permit of quibble.

What I have endeavored to bring to your mind, is the order and unity of life. There is an individual unity and a larger racial unity, or even world unity—an individual whole and a community or social whole. When we feel, think, and do, it must be as individuals. The initiative must come from within. We can train animals but we must educate children; in the former we limit or destroy individual initiative, in the latter we stimulate it and increase self-direction.

Individuals are born with the possibilities of life but are in no true sense living. They must be awakened and made to see the great possibilities that lie within their grasp—opportunities that are meant for them alone. To enable them to see their places in the world order is the problem of the teacher. Unless the teacher sees this order he may hear lessons but he can never teach. When he sees the child in its past, its present, and its possible future he will have less difficulty in determining the nature and order of the subject-matter to be used. He will be interested in, and concerned with, the child thru every step of its progress. The expert gardener is not interested in the particular tree *per se*, but he is interested in its heritable characteristics, its past, its present, and its probable future. How much more should we be concerned with the whole child.

We can only truly determine what is the best education for the individual in the high school when we know the individual, and further know what has gone before and what is to follow. We must not forget that the school is established for the child and not the child for the school. Each grade or step from the first to the last must be conceived as a part of a larger whole, and planned with reference to the particular needs of the individual child. When this is done in the grades the high school can well afford to accept the product, and when this is carried out in the high school the college can equally well afford to take the product.

This will necessitate a complete reorganization of our present school system. But I think the time is ripe for it. Take a single illustration: We have recently discovered that all human beings are vitally connected. We are links of one mighty chain—what injures one, indirectly affects all.

We are apt to think that this condition was always true; altho we, in our ignorance, did not know it. This, however, is not the case. It is a condition that has been brought about in recent years by the advance of science and the changed social and commercial relations. The primitive man contained but little in his soul that was vital to his neighbor. His death meant little loss and more food for others. Wars of extermination were the natural products of the age. Today the arteries of trade and commerce, of science, literature, and art are bringing us rapidly into a world-whole. Arbitration is taking the place of war. No one under the present system can live within himself. Ignorance and low motive is dangerous to all whether found in the train-dispatcher, the engineer, the bank teller, the preacher, or the teacher.

Does it not seem surprising that knowing as we do the great changes that have occurred in civilization and social life, we still persist in using the same curriculum that was used in the Middle Ages? If to educate means to put the individual into touch with his environment, certainly the studies that were best fitted to put one in touch with the mediæval environment and its aristocracy cannot be the studies best fitted to put one into touch with the twentieth-century environment and its democracy. Quoting from a former paper:

> In harmony with the laws of physical development there seem to be at least four rather clearly marked stages of mental development. The first covering the period from birth to six or seven; the second extending to fourteen; the third to eighteen or twenty; the fourth continuing thru the rest of plastic life. There are overlappings and some elements and needs common to all periods, but the distinctions are sufficiently marked to be carefully noted in all true education.
>
> The first is the kindergarten period, in which the child thru the exercise of instincts gains intelligence and acquires a limited amount of muscular control. As Froebel has said, it is the period *par excellence* for rendering the inner outer. The second is the period *par excellence* for gathering simple facts, concrete material: for gaining fundamental muscular control and acquiring the use of the fundamental instruments of education, e.g., reading, writing, drawing, music, numbers, and the elements of language, and science. The third is the period of youth, the period of organization and construction, of generalization and the perceiving of relations; the period of transition from boyhood to manhood, from being self-centered to altro-centered. The fourth is the period of specialization, of research, of purer and clearer thinking, and of constructive willing. It is the time of service, of vocational activity, of the Master's business and the world's work.

If we have rightly characterized the different stages of development, the high-school period stands out as the most trying and vital of them all. It is a period of rapid change, of ideation and castle-building—a struggle between individual consciousness and group consciousness—between selfishness and service. It is a period when the student is old enough to do racial harm but not old enough to foresee the results of his acts.

Because the period is so vital, our high schools should enroll all the children of the community of high-school age instead of only one-twentieth of them. The teachers of these institutions should be free to work out

their own salvation according to local needs and the immediate interests of the child. I believe when we understand one another this is virtually what we all want.

I have suggested what seem to me to be the common elements or absolute essentials to be required of all children in the elementary grades. These are the instruments that are to unlock the granaries of civilization. In acquiring the use of the instruments of thought and expression the child will be brought into contact with much useful knowledge. The bright child, in good health, ought to do this elementary work in six years, the average child in seven, the slow child in eight. This would bring the average child to the high school at thirteen. With a standard high-school course of four years, the average individual would be ready for college at seventeen. If the bright boy and girl are able to finish the high-school course in three years, which I think is feasible, then it would be possible for the extra-bright child to be prepared for college at fifteen, the bright child at sixteen, the average child at seventeen, and the slow child at eighteen or nineteen.

What shall be the high-school course? I shall permit the high-school teachers of the various communities to answer. They know or ought to know the peculiar local conditions better than I. But in closing I am going to make a few suggestions which I think ought to be and will be acceptable to the college and the high school alike.

What shall constitute the entrance requirements of the college?

Examining the curricula of the various secondary schools today we find a great variety of subjects and these will doubtless increase as we ease up somewhat on the "fitting-for-college" idea. The most prominent of these subjects can be grouped under the following heads:

1. English.
2. Foreign Languages—Greek, Latin, German, French, Spanish.
3. Mathematics—Beginning and Advanced Algebra, Plain and Solid Geometry, Trigonometry.
4. History and Social Science—Ancient, Mediæval, and Modern History, English and United States History, Civics, Economics.
5. Physical and Biological Sciences—Physics, Chemistry, Botany, Zoölogy, Physiography, Agriculture, Physiology, General Biology.

From these subjects I think we are justified in making up the entrance requirements somewhat as follows:

1. The student should show the completion of at least fifteen units of credit from an approved secondary school, three of which must and four of which may be in English. (A unit represents the equivalent of one course carried for one year, recitation periods of not less than forty minutes occurring four or five times per week.)
2. At least two units should be required in a language other than English, and if but two units are offered they should be in the same language.
3. He should be required to offer at least one unit from each of the following groups: 3, 4, 5. This is for the sake of variety and balance.

4. He should be required to offer at least three units in some one of the above groups other than English. This is to give continuity of thought.
5. The remaining five, or possibly six, units should be accepted from work credited in any approved high school toward its diploma. There is possiblity of abuse here but I am willing to trust the good sense of the high-school men and women.
6. No credit for less than one-half unit should be accepted toward college entrance. This scheme provides for nine or ten of the fifteen units as follows: three in English, two in a foreign language, at least one in each of the following groups: mathematics, history and social science, physical and biological sciences, and one or two units additional to be selected from some group other than English to complete the requirement of three units. The additional units to be left provisionally in the hands of the approved secondary school. When the high schools have carried their students thru the work as indicated above, the colleges should open their doors to the graduates and encourage them to enter by every legitimate means.

The limit of this paper will not permit me to give the reason for the entrance requirements as herein indicated, but from beginning to end I have had in mind the immediate needs of the high-school boy and girl for which the schools are established.

Since writing the above my attention has been called to the revised entrance requirements of the University of Chicago, and the report of the Committee on the Articulation of High School and College: I agree in the main most heartily with both.

III. OTIS W. CALDWELL, ASSOCIATE PROFESSOR OF BOTANY, UNIVERSITY OF CHICAGO, CHICAGO, ILL.

The New Plan of Admission to the Colleges of the University of Chicago

1. *Present situation.*—The modern public high school has now become practically an autonomous body. It has been studying the needs of secondary-school education from the broadest possible point of view with its relations to colleges as one of the many questions to be considered. Secondary-school education was never so efficient as it now is, and there never was a more wholesome relation between secondary schools and colleges. It is generally recognized that the influence of colleges upon secondary schools has in the main been wholesome, and that the present high standard of secondary-school education is in a measure the result of the relation that has existed between these educational institutions. The period of college dominance in any unfortunate way is practically over. The colleges were never so anxious to articulate their work with that of the high school, and never so ready to recognize the peculiar function in education that must be met by high schools. The present attitude is one of co-operation, not of dictation. The college has found that it needs to study the purposes and methods of the secondary school, first, in order to be of any assistance that it can in the investigation of the general problem of the education of the people; and secondly, in order that it may learn how to do its own work in a more effective way. The college needs the assistance and friendly criticism of secondary-school people in the more

effective administration of the earlier years of college quite as much as the secondary schools need the friendly co-operation of the college men in increasing the efficiency of the secondary schools.

2. *General principles related to high-school organization.*—There are principles that are now generally agreed upon, and these should furnish us a sound basis for further co-operative study of secondary-school work.

a) The needs for a democratic education of people of secondary-school age demand that the courses and methods of the high schools should be those which will give the highest degree of efficiency to high-school pupils whether or not they are to go to college. This education should make young people worth while to society.

b) Good training in English, which is the nation's language, is needed by all of the people.

c) A sufficient intensive study should be made of one or a few lines of work so that the pupil may secure a standard of scholarship. Some elementary notion of how knowledge grows and an appreciation of the difference between what we know and what we do not know should be established. This may be secured by sequences of courses in the same general field. This is the principle of intensification.

d) Not only do we recognize the principle of intensification but also the distributive principle. There should be at least an elementary acquaintance with the great divisions of the world's knowledge—as mathematics, science, history, literature, modern language, industry. The high-school course should introduce its pupils to as many of these fields of knowledge as possible.

e) It is also fairly generally agreed that subjects should be so presented that they may appeal to pupils as having an appreciable significance. The worthwhileness of knowledge is stimulating to pupils of high-school age and enhances ideals of scholarship as well as of practical life. Civics, language, science, vocational subjects, etc., do not lose but gain when their material and methods enable the student to see that these subjects bear a direct relation to practical life.

3. *The college needs students who can do effective work.*—Whether a high-school graduate goes to college or goes into some other activity, he should be tested by his ability to do something that is worth doing. If the college can devise means whereby it may test students upon the basis of their ability to do work as the world tests them, it will have a better method of determining college entrance than the bookkeeping method which has so often prevailed. Furthermore, it is fairly generally agreed by foremost students of the question that the kind of high-school course which has general significance to pupils gives the best foundation for students who are going to college as well as for those who are not going. It has been argued that students who are not going to college should have a more fully significant course than those who are going. It may be quite as reasonably argued that students who are going to college need the same kind of course. Thru perspective gained by means of meaningful high-school courses, their notion of the relation of college studies to what is going on in industries, commercial life, etc., is maintained in a better way than if their high-school course has embodied only those academic studies which have been required of pupils who go to college. It would seem that this should allow the best foundation for work for all.

4. *The principle of continuation of the first years of college work with the work of the high school should be recognized.*—When the pupil leaves the high school and enters the college with its somewhat more free atmosphere, its different points of view, methods of instruction, social environment, it is of advantage if he may continue lines of work in which he has already done something and in which he has found an ability to work well.

5. *The needs of students in the first years of college demand that more careful attention shall be given to methods of instruction.*—The lecture method which was recently so prevalent in college seemed necessary when instructors must present to their classes a large amount of material which was not available in reading material to which the classes might be sent. Such a situation will always be more or less prevalent, but when the lecture method is used with lower classes it sometimes occurs that the instructor merely recites to his class in a somewhat unstimulating way and the class attempts to secure sufficient notes by means of which they may later come to an understanding of what the instructor presented. Real teaching of elementary students necessitates that there must be a co-operation between instructor and students to the end that students may think consecutively and effectively concerning the subject in hand. It has been well said that "Sometimes the material from the instructor's notes passes from the instructor thru the student's pencil point to his paper without the information entering the head of the instructor or student." Dynamic thinking on the part of the student is to be sought, and the means of bringing that about should be more carefully considered in the college, as well as in high school.

6. *Based upon the above and other considerations the University of Chicago has recently passed legislation bearing upon the relations between the high schools and the colleges of the University and upon college curricula.*—This legislation is the result of two years of study given to the question by a special curriculum committee. That part of the committee's report which bears upon college entrance follows:

> Students applying for entrance to the University of Chicago present by certificate from approved schools or by examination 15 units of entrance credits. Among these must be 3 units of English and in addition 1 principal group of 3 or more units, and at least 1 secondary group of 2 or more units. These additional groups may be selected from among the following subjects:
>
> 1. Ancient Languages (Greek and Latin), it being understood that to make a group of 2 or 3 units the work must be offered in a single language.
>
> 2. Modern Languages other than English; to make a group of 2 or 3 units the work must be offered in a single language as under group 1.
>
> 3. Ancient History, Mediæval and Modern History, English History, United States History, Civics, Economics.
>
> 4. Mathematics.
>
> 5. Physics, Chemistry, Botany, Zoölogy, General Biology, Physiology, Physiography, General Astronomy.
>
> In group 5 not less than 1 unit may be offered in either Physics or Chemistry. Any combination of the subjects within each group is permitted.

Of the 15 units offered for entrance at least 7 must be selected from the subjects in groups 1 to 5. Not less than ½ unit may be offered in any subject.

The remaining five units may be selected from any subjects for which credit toward graduation is given by the approved school from which the student receives his diploma; but Greek, Latin, French, German (or any language other than English), Mathematics, Physics, and Chemistry, if offered, but not as above under 1 and 5, must each consist of at least 1 unit. Latin may not be *continued in college* unless at least 2 units be offered.

SUMMARY OF ENTRANCE REQUIREMENTS

3 units of English.
3 or more units in a single group, 1–5.
2 or more units in another single group, 1–5.
2 units in subjects selected from any of the groups, 1–5.
(Total 10 units in English and groups 1–5.)
5 units selected from any subjects accepted by an approved school for its diploma.
Not less than ½ unit will be accepted in any subject.
Entrance with conditions is no longer permitted.

The plan for curricula within the colleges which was a part of the report from which we have just quoted involves a very careful examination of the work of the first years of the college course. We propose to grade our students so that the inefficient may be eliminated early in the course. We propose to accept the graduates from our co-operating schools and to test these schools thru the efficiency of these graduates. During each of the last two years more than one hundred students were eliminated because they were unable to carry work in the proper way. While it is the desire of the University to have those students who can work effectively in so far as its facilities will permit the University to care for them, it must be understood that the University proposes to increase the standards of scholarship by this careful method of inspection of its own work; also the University has invited secondary-school men to visit the university classes, to inspect the nature and efficiency of the instruction, and to make report to the administration. The reports from secondary-school men will be made the basis of the program for the next annual conference between the University and its co-operating high schools, to the end that both University and high school may have the benefits of co-operative inspection and constructive criticism. The plan adopted further provides for sequences of courses running thruout the four years of the colleges, and details of that statement may be had by those who desire them.

DISCUSSION

ARTHUR H. CHAMBERLAIN, University of California, Berkeley, Cal.—For years the matter of a closer articulation between secondary school and college has been under consideration. For the most part, however, generalities have been indulged in. President Aley, Dr. Luckey, and Dr. Caldwell have been clean-cut in their statements today and the report of this session will be a valuable contribution. Professor Davis has set forth the new Harvard plan and the report of Mr. Kingsley on "Articulation of High School and College" has been most illuminating. The new program of "Entrance and

College Requirements of the University of Chicago," as reviewed by Professor Caldwell, will be far-reaching in its effects.

Criticism of the university by the high school has in the past been indulged in frequently. It cannot be denied that, with all its domination, the university has been no small element in raising standards of high schools the country over. Moreover, in many respects our universities are more liberal than are the high schools themselves.

At last the time has come to *adjust relations* and stop talking adjustment. We must cease preaching articulation and begin to *articulate*.

At the expense of being dogmatic and misunderstood I shall, in the interest of time, present to you several propositions. These propositions I shall be pleased to support.

Proposition 1.—There should be a closer union of interests than now exists between the secondary school and college. This is a truth universally understood, generally admitted, but seldom practised. To prove it is beside the mark. The man or woman who does not recognize the inadequacy and weakness in the present relations is enjoying to the full the educational slumber-time of the Middle Ages. To awaken such would be a crime.

Proposition 2.—To square with the advance thought of the time, both secondary school and college must set their courses toward a common goal. This end must be not only preparation for life but for living today. Education fits for service; hence it must be vocational in the broad use of that term.

Proposition 3.—To meet this requirement means that the university must open its doors to every boy and every girl competent to receive instruction therein. The college must, therefore, offer larger opportunities for election. The student must directly, or he must indirectly thru those responsible for his welfare, elect his major or chief subject of study, instead of having this thrust upon him by the college. From related groups of subjects his advisers should then assist him in selecting the remainder of his course. The choice of the major will, in large measure, determine the other subjects to be taken.

Proposition 4.—The university shall recognize for entrance any subject pursued successfully in a secondary school of good standing, be that subject Latin or blacksmithing, geometry or domestic science. No definite subject shall be specified for entrance save English alone. Instead of prescribing the subjects that shall be presented for entrance, the college shall take the students as handed over to it by the high school. In the same way the high school shall accept all pupils coming as accredited representatives of the grammar school.

Proposition 5.—No teacher, man or woman, who has not had experience in the secondary school should, under normal conditions, be on the instructing staff for Freshmen in the colleges. In the same way no teacher lacking grammar-grade experience should instruct the entrance high-school class.

Proposition 6.—The so-called accrediting of secondary schools by colleges must be on the basis of quality of work done, not of the number of subjects offered in the high-school curriculum. The standard of such secondary school may be determined by the progress and fiber of the students as exhibited in their college work. Moreover, the proficiency of the secondary school is determined by the general character of its work, the spirit of the school, and the ability of the pupils. In brief, what we speak of as "atmosphere" is the determining element. The completion of a particular subject or a final ranking in certain required courses is not necessarily a test of fitness.

Proposition 7.—Instead of pushing down into the high school from the college certain courses in political science, economics, sociology, mathematics, and pure science, these technical courses must find place in the college. The high school must give greater attention to the fundamentals and to teaching well a few things. It must not spread to the point of superficialty. This means a continued enrichment of the curriculum, but greater freedom in the matter of particular requirements.

Proposition 8.—The secondary school is not a fitting-school save for life. The college is not a fitting-school save for the greatest thing in life, which is complete living. The secondary school is a preparation place for an efficient life. In fact, it is an institution in which to live an efficient life here and now without regard to college. The college takes those who are to avail themselves of its privileges and carries them forward to a point of greatest efficiency.

Proposition 9.—Under proper adjustment the four years of the secondary school and the four years of the college may be simply blended into eight years of school life.

Adelaide Steele Baylor, Department of Public Instruction, Indianapolis, Ind.—The maladjustment between secondary schools and higher institutions of learning is one of the vital problems of today in education, and a careful inquiry into causes for these conditions is not only timely, but suggestive of remedies.

Many of these causes are plainly in evidence. The pressure from above down, with the good intent of preparing pupils for college, has continually hindered the very thing it attempted to accomplish. Secondary schools have been dominated by college and university requirements, until teachers of high-school subjects have been so absorbed with the letter of these demands that no time has been left to consider the things most needed—the cultivation of individual power of initiative, ability to think and to do.

Lack of uniformity among college and university men as to the standards for entrance to these institutions has had its effect. Each man, with an "eye single" to the special requirements for his own department, does not always regard his work in relation to the entire college scheme and other departments. I am of the opinion that there is less common discussion of common problems among the members of faculties of higher institutions of learning, than among those of secondary, elementary, and primary schools.

The association that today brings together secondary and college men to discuss questions of common interest is one of the most important educational bodies in the United States, because it is doing more to solve this problem than any other one factor.

Again, many university and college men and women are untrained teachers. Standards of requirements have been set for teachers below the higher institutions of learning, but I do not know of any standards that have been set for those within those institutions.

When college and university men are trained in the pedagogy of elementary and high-school work, when they have worked in the general lines of school management, the problem will be partially solved.

The training, too, of high-school teachers must continually be extended. Scholarship is one of the great things for a teacher to possess, but it will not be of great positive value unless it is tempered and adapted thru a knowledge of children and sane pedagogical methods.

In brief—less domination from above down, and more recommendations from secondary-school people; frequent discussion between faculties of both institutions upon common problems, with the attention centered upon the individual rather than subject-matter and courses of study; better trained teachers in all lines of schoolwork.

DEPARTMENT OF KINDERGARTEN EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Miss Jane L. Hoxie, 6021 Woodlawn Ave.....Chicago, Ill.
Vice-President—Miss Mary E. Gamble, Garfield School Kindergarten....East Oakland, Cal.
Secretary—Miss Harriet E. Huggins, associate principal, Oakland Kindergarten Training Class.....Berkeley, Cal.

FIRST SESSION.—Tuesday Morning, July 11, 1911

The Department met in joint session with the Department of Special Education and the Department of Elementary Education. For program see Department of Special Education. Topic: "The School Laggard."

SECOND SESSION.—Thursday Morning, July 13, 1911

The Kindergarten Department met in Century Hall, at 9:30 A.M. In the absence of the president, Miss Jane L. Hoxie, the session was called to order by the vice-president, Miss Mary E. Gamble. Miss Gamble gave Miss Hoxie's greetings to the assembly, and after a few words of welcome introduced the first speaker, Miss Mari R. Hofer, director of the Chicago Training School for Playground Workers, who read a paper on "Music in the Kindergarten."

Miss Katherine Ball, supervisor of drawing in San Francisco schools, followed with an address on "The Development of the Color Sense." She had some very beautiful oriental brocades on exhibition on the walls to illustrate her points.

Owing to the sudden death of his mother, Mr. Lester Van Nostrand was unable to appear in person, and his paper on "Milton Bradley" was read by Miss Gertrude Hussay, a representative of Milton Bradley Company.

Dr. Richard G. Boone, lecturer on education at the University of California, read a strong paper on "The Kindergarten: Its Influences upon Higher Education." Dr. Boone appeared as a representative of the National Association for the Promotion of Kindergarten Education.

A business meeting followed.

It was moved, seconded, and adopted that the Chair appoint members to serve on the nominating and resolutions committees, the latter to draw up the resolutions expressing sympathy to Mr. Lester Van Nostrand for the loss of his mother, and also resolutions of regret in regard to the loss of Milton Bradley.

Miss Gamble appointed Miss Lucy T. Ellis, of Phoenix, Ariz., Miss Susan Thompson, of Oklahoma, and Miss Mari R. Hofer, of Chicago, Ill., to serve on the nominating committee.

Miss Gertrude Hussay was appointed chairman of a committee to be selected by her to draw up the resolutions.

Adjournment followed.

THIRD SESSION.—Friday Morning, July 14, 1911

Miss Gamble called the meeting to order at Century Hall at 9:30 A.M. and introduced the first speaker, Professor C. E. Rugh, associate professor of education, Univer-

sity of California, Berkeley, who read a paper entitled, "The Moral Instruction of the Child."

Miss Evelyn Pluss, kindergarten training teacher of the Los Angeles Normal School, was next introduced. Her paper was entitled "The Kindergarten as an Ethical Laboratory."

The paper on "The Kindergarten as a Factor in Education for Efficiency," by Bertha M. McConkey, supervisor of kindergartens and primary schools, Springfield, Mass., was read by Miss Lucy T. Ellis, director of garden kindergartens, Phoenix, Ariz., as Miss McConkey was unable to come west.

Mr. Frank E. Parlin, superintendent of schools, Cambridge, Mass., was detained in the East by the illness of his wife, and Miss Jenkins of Pasadena read his paper entitled "The Kindergarten of the Future."

An informal discussion followed, the topic being "The Kindergarten as a Preparation for Life vs. the Kindergarten as a Preparation for the First Grade." Among those who took part were Mrs. North-Whitcomb, of San Francisco, Miss Mary Hannan, of Milwaukee, Wis., Miss Vandergaw, of Oakland, Cal., and Mr. Zelenko, of Moscow, Russia. Mr. Zelenko had recently visited the schools of Brussels, Belgium, and testified to the harmony existing between the kindergarten and the higher grades.

The nominating committee then reported the following names:

For *President*—Miss Stella L. Wood, superintendent of kindergarten normal school, Minneapolis, Minn.

For *Vice-President*—Miss Cora B. English, superintendent of public kindergartens, Kansas City, Mo.

For *Secretary*—Miss A. Jessie Davis, kindergarten director, Superior, Wis.

It was moved, seconded, and adopted that the Secretary cast the ballot of the Department for these officers.

The Committee on Resolutions reported as follows:

We, your Committee on Resolutions, beg leave to submit the following report:

WHEREAS, Thru Milton Bradley the kindergarten of America was materially strengthened in its early struggles for existence; and

WHEREAS, Thruout his whole life he proved a loyal friend and benefactor to our cause;

Resolved, That we express our deep appreciation of his friendship and our keen sense of loss in his passing on.

Resolved, That we, the members of the Kindergarten Department of the National Education Association, assembled in San Francisco, July 8 to 14, 1911, extend our sympathy to Mr. Van Nostrand in his bereavement thru the loss of his mother.

Resolved, That we extend to Miss Mary E. Gamble a vote of thanks for her untiring efforts in promoting the success of the Kindergarten Department of this National Education Association, and to Miss Harriet Huggins for her able assistance; for the day in Oakland, the luncheon, and the many other courtesies extended to us by local kindergartners; to Miss Mayberry for her generosity in lending us the beautiful collection of Japanese tapestries; to Francis Valentine Poster Company for the special kindergarten badge furnished by them.

Respectfully submitted,

Committee { GERTRUDE E. HUSSAY, *Chairman*
ADA MAY BROOKS
ANNA I. JENKINS

The article that appeared in *McClure's Magazine* for May, 1911, in reference to the New Method of sense training and mental development used by Maria Montessori, of Italy, was mentioned, and Miss Brooks, of Pasadena, reported on a friend's morning visit to one of her schools.

Adjournment followed.

HARRIET E. HUGGINS, *Secretary*

PAPERS AND DISCUSSIONS

MUSIC IN THE KINDERGARTEN

MARI R. HOFER, DIRECTOR OF TRAINING SCHOOL FOR PLAYGROUND WORKERS, CHICAGO, ILL.

As the Irishman said, "When in doubt as to the turn of the road, it is always safe to turn around and go forward backward."

While history is not always the truth, or all of the truth, it is a pretty good guide of the course of events. As regards our subject, it is legitimate to ask, What has been done in kindergarten music? What are we doing in kindergarten music? On felicitous occasions the subject of music is given place upon a national program; also thruout the country, at state and local meetings, the subject of music in the kindergarten is discussed. These occasions are far enough apart to permit only the most fundamental elucidation of the subject. As a rule we get no farther than its sentimental justification and are retold of its God-given properties and spiritual outworkings into childlife. An occasional magazine article appears wherein some patient lover of the art attempts to explain so-called kindergarten methods of teaching music, and aims to present the theory of music to younger children in more or less playful and helpful ways. In the meantime, others of our pet heresies have come into established being. The folk-song and game which Froebel retained for us are now well-settled factors in our new education life. The festival so tentatively ventured has outgrown the kindergarten ranks entirely and is now a happy community feature in which we are humbly asked to take part. Oh yes! the kindergartner and the kindergarten have "made good" in educating the public almost to the point of absorption.

As it stands, we can truthfully say that during the last twenty years the subject has been scanned from all points of view; that during this period of experimentation we have learned *how* to use it in a measure and that thru us music itself has received a fresh impulse. But it will be granted that the real work of kindergarten music yet remains to be done, viz., classification, proportion, and right choosing. What shall we use, what shall we reject? The music of the kindergarten has been chronicled from every conceivable point of view. We have had, first, the orthodox and theoretical statement, which subordinated music entirely to the thought aspect of the work. In this case the tune did not necessarily interpret the spirit of the words, and our adaptations were more or less forced and wooden. This stage was rather prolonged and made the advent of real children's music, written from the child's point of view, a delightful revelation. In present years we have enjoyed the composer for the kindergarten, where the musician has concerned himself with the true relation of music and words. In the first place, he has ruled that there should be good

poetry and then has lent his best talent to the musical setting of the same. What the child would feel and think in music has been his strongest concern. The leader in this was our dear Father of Kindergarten Music, Reinecke. It was easy to follow in his wake after he had set for us the pace of his naïve, childlike interpretation, drawn from the pure music source of the Germans—Smith, Hill, Neidlinger, your own early contribution by Mrs. Wiggin. A later poetical volume by Mrs. Knowlton, followed by many able contributors and more recent artists such as Mr. Aldrich and Mr. McCurry of your own ranks; all these, aided and abetted by generous publishers, have helped to establish a library of children's music, to which we turn in our daily vicissitudes of program-making. Added to these, the volumes of piano music, rhythms, and marches, new musical versions of Mother Goose, make it possible to fit every tint and shade of musical mood desirable for the kindergarten.

At various times, we have developed classical tendencies, and in semi-occasional crises we have had the Old Masters revived for us. Some soul, newly convinced of the vicariousness of music, interprets Chopin, and Handel's *Largo* for us, to the effect that the children weep in sympathetic response. Just now we are in an era of popular tastes in regard to kindergarten music. As kindergartners, we are feeling the need of being *more like other folks*, less eclectic and superior in our tastes. We must hold our own with the present-day trend, which we grant is not of Mozartian purity. We are choosing the easier way; moreover, the children know more popular music than good music. Alas! they know nothing else—they will sing it *anyway*, then why not use it? It is less trouble and helps move the world along.

The general adaptation of the kindergarten to the public-school systems is a modifying element to our possibly over-æsthetic tendencies. We must reach out and meet the other half, even tho our ideals suffer somewhat in the effort. Also we are advancing in music education and have attracted the attention of the college professor who wishes to turn the kindergarten into the first grade of the music system. We can have no sympathy with this, tho the child might be able to stand the test. This person is usually a man who is more interested in teaching *things* than children. To him this one precious year in the kindergarten atmosphere of music is a waste of time when the child might be learning the incalculable value of the dots and lines of the musical hieroglyphics. He does not recognize the imagination as a factor in learning, or the value of impression in education. After this a kindergarten music system promptly appears in which sticks and blocks convey these values.

Anyone who has had to do with later artist-making, or has attempted to perfect singers and players, knows the hopelessness of trying to strike sparks from unilluminable material. Unless the child has good musical intelligence, we will say, a temperamental inheritance, the kindergarten

is the one and only place where he may acquire musicalness. Here, if anywhere in his oncoming strenuous career, we can and must take the time to use music musically. Here, in connection with sensible sentiment and subject-matter, he may truly come under the artistic influence of the *art* of music.

This is a delicate task and one worthy of the teacher's best effort. In the daily uplift of happy little voices in song, the kindergarten may premonitorily run the entire gamut of musical experience and training. While little bodies respond to its joyful rhythms, we may sow the seed of purity and wholesomeness of action.

Last fall, the writer, carrying an armful of beautiful autumn leaves and foliage to help decorate a hall for a real harvest festival in one of the play centers of Chicago, cutting across Milwaukee Avenue thru some bleak and dirty streets to reach this obscure corner, quickly turning a corner, ran into the wraith of a fair little girl playing in the offal at the edge of the walk. On seeing my leaves, she at once arose with her blond hair streaming in the wind—dirty, and blue with the cold as she was, while her eyes danced with delight—and sang, in her childish treble, that joy of all little children

"Come, little leaves," said the wind one day.

Where, under any circumstances other than those of the kindergarten, could such a neglected child have had this nature picture in mind and heart and voice, and, while living and playing in the grime, have responded to the sudden bursting upon her with a bit of that real country?

The admonitions and instructions of a good teacher sound preachy and like the goody maxims of the bygone past in the ears of the up-to-date high-school and college girl of the present. Rare is the girl in the kindergarten training class of today whose refinement of temper and taste in musical matters by reason of previously gained heredity or home training is able to respond to the delicacy of a childsong. The moment her mind is off her training work, she is back to her rag-time. It is dangerous to allow her to conduct rhythms and games at first, as her every movement smacks of the variety stage. A simple nature interpretation becomes theatrical and affected, and her first year is spent in mawkish self-consciousness in her effort to find herself.

Much has been said in this convention on child-saving, even in questions of deepest import. How are we to stay, how can we hope to stay, the swift onrushing current of willfulness and indulgence when from earliest infancy the American child is fed with the untrue and unbeautiful in life? We cannot hope to bring up children on orgies of sound and motion and expect them to keep sane and balanced faculties. Even our much-loved playground must come under caustic criticism, if it is only another place where the child can do just as he pleases, to which he may escape from home duties, and where everything is done to make life pleasant for him.

How can the ideals of the most carefully trained kindergartner in the sentiment for the maintenance and beauty of life stand against the stream of vaudeville vulgarities which are countenanced by parents, nay, in which parents indulge with their children? Children are taken to places where parents should blush for themselves. The next grand reform is that of parent and parenthood.

You will pardon the turning from the practical to the moral side of the question, which arises in all our educational work. What are we preparing our children for? What is the future good for which we are striving? Even in our greatest attainment of material good, wealth, position, power, this being gained, are we well enough stocked in the great realities and fundamentals of education to use it to its highest degree of education? Well we know that this chase frequently destroys the finer sensibilities of appreciation when the end is attained. The modern business man is too worn out when success finally comes to him to enjoy the best for which he has striven of music or food when he gets it. It is unfortunate in our American life that we train for the future when the happy mean would be to work into each day's fabric a little of the art and recreation which is absolutely essential for the growth of soul and body. Alcohol, as distributed in fruit and grain and all our foods, is a necessary nutritive element. When abstracted and imbibed in its essence form, it is rank poison.

As kindergartners we are very much mistaken if we think that the day of our vigilance is over. While the good work of reform has now begun from above in the schools, and is working its way down, we have yet a number of generations to grow into sanity before we are on the safe side. A teacher and a mother who has recently made investigations into the social conditions of college life says that the present unwholesome trend of the dance is due to the low-class music and its dance-hall associations. This music and the dances and posturings inspired by it find their way *somehow* into our college circles where young, innocent girls, lilting and swaying to its sensuous rhythm, take part in what constitutes the oreaic element in our less respectable social groups. How are we to know good from bad in these days when the full cup of unadulterated stimulant is offered to the lips of every child? He may drink freely for aught of interference by parent or teacher and we have the result in a common nervous intoxication. We have become indifferent to the influence of the stimulus—a moral indifference that borders on criminality.

As teachers we have looked deeply into the souls of children and seen the lights and shadows of impression, our work, reflected therein. Of all the materials we use, music brings the quickest and most general response. It rules our kindergartens for us. Thru it we reach the springs of thought and action. We correct and restrain, as well as free, the impulses. While we are moving the waters, comes the change of habit from unorganized to organized condition. Whatever comes to us in embryo for good or

bad, we can send forward in the solid realization of clean flesh and blood. We know habit is that which has become cells and we aim to change these or to start new ones.

A young teacher in Chicago, when asked by the pompous civil service examiner down in the City Hall what was "the place of the piano in the kindergarten," timidly but convincingly responded that "the place for the piano in the kindergarten was up in the corner near by the window." Let us take the piano out of the corner. This is one thing in our training-class work which we can remedy. We must have musicians trained in the kindergarten music we wish played in the kindergarten. As it is, we are yet at the mercy of the random pieces which a girl may know—glad to get any kind of playing which helps move the program along. Each kindergarten training class should have a course as long as is possible, devoted to the analysis and playing of piano music suited to our work. Just to hear interpretations, even if we cannot play, will help qualify the crudities to which we are subjected. Get, if possible, an instructor out of the ranks who knows what is wanted, for it is largely a waste of time to follow the generalities of the average piano teacher.

In the end, the music of the kindergarten must be what the kindergartner has to offer in the way of fundamental training and taste. In this instance, as in others, we revert to the species. A girl who has had a large and liberal training in the popular street music of the day, not because she is uneducated, but thru her school and college contacts, will revert to the vaudeville type in her kindergarten music. All who have to do with the training class know the diffculty of the task of changing the taste started in the wrong direction.

As kindergartners we feel that we should prolong rather than shorten the kindergarten period for the little ones. How soon is the childlike gift of ideality and innocence lost in the oncoming vortex of vulgarity. Theoretically we hear much from the college professor on the necessity of prolonging the infancy of human kind, but the greater our facility with educational methods, the more knowledge we seem to cram into the child. The period of wholesome experimentation and natural growth is continually shortened in order that we may more quickly prepare him to meet—what? Not a greater degree of efficiency in higher things, but to sharpen and make him stronger to struggle more ably in the slough of material success.

As teachers, we must have a care and, if need be, revert to such of old-fashioned moral convictions as we may yet remember, possibly revive some of those sterner traditions of our elders. We should take European diet of taking our pleasures as we go along, interpolating good art training into the lives of our children as an ordinary and necessary thing, inculcating appreciation of higher things as we would ordinary table manners. Get in the habit of having the good things of life a little every day, a time and place in the ordinary routine for good recreation, a little leisure for good impressions to take hold in the spiritual sub-soil of our lives.

If I have wandered to the moral side of the subject, it is because in the kindergarten we have mastered the soul of the child. We know the tremendous import of the emotional nature and the danger of playing upon it. In music and rhythm, we have tremendous instrumentalities for good and evil. Kindergartens, in a way, stand responsible for the emotional element in education and we must see the problem to the end. While the vibration which we have started has passed beyond our reach and control, can we not aid in the larger work of moral reform by taking fresh hold on our ideals, making a vigorous campaign against immoral music? We have censored moving pictures and the theater; why not the most subtle of all the art stimuli, the living art of music, which is an accessory to all recreation? Armed with a Tolstoian righteousness, we may help banish the Apache dances and the grisly melodies from respectable social occasions. Let us enlist our mothers' and parents' clubs anew in a new crusade for the moral salvation.

THE DEVELOPMENT OF THE COLOR SENSE

KATHERINE M. BALL, SUPERVISOR OF DRAWING IN THE PUBLIC SCHOOLS, SAN FRANCISCO, CAL.

The keenest perception of color and the finest appreciation of its beauty is only the result of training, either by means of an æsthetic environment, or thru the process of direct and specific education. Taste counts for naught, unless it is educated.

The degree of growth which a pupil may acquire is dependent upon his inherent qualification and his opportunities for study. Intelligence regarding color is the same as that pertaining to other subjects. Some individuals reach their limit very early, while others are capable of rising to great heights, but all except those who are color blind—of which there are but few—may acquire some knowledge and power, which will be of profit and pleasure during an entire life.

Color training must be eye training. Too frequently, not only has the subject been treated scientifically, instead of æsthetically, but devices have been substituted for principles.

In reviewing the history of pedagogy, it may be seen how the true order of developing the child's mind and faculties has been reversed, by working from the logical to the psychological, from the scientific to the æsthetic, from the technical to the educational.

The teaching of color shared the common fate, and in many localities this method still prevails.

It is very difficult to realize that the small child cares naught for the logical schemes so dear to the adult mind, but the disintegration of white light, the recognition of spectrum colors, and a knowledge of their names, however reasonable the scheme may seem, will never unlock the door of the world's color wonders.

What the children need is the opportunity of seeing and using in combinations, not the six normals, but many colors, so tempered that a discord is impossible.

Their first notions should be derived from color mosaics, in which grayed colors are so juxtaposed that they enhance each other's intensities.

The quality of a single color is not absolute, but variable according to its associated colors and to the area which it covers.

A hand placed alternately on a pink and a yellow surface will change its complexion in a surprising manner, while squares of the same neutral gray paper, mounted on different colored backgrounds, will reflect varying qualities of hue.

Again, what appears to be a very subdued color in a small sample, will become most intense when used in large quantities. Most students of chromatics have had the unpleasant experience—when papering a room, or painting a house—of seeing a startling spectacle of color intensity, after having carefully selected what appeared in the sample to be very unobtrusive.

Study the scale of normals as it is commonly presented, and compare it with the solar spectrum or even the "bow of promise." How different are the two effects. One is a thing of beauty, while the other is its crude symbol. One appeals to the eye, the other to the intellect. One is an ocular appearance, the effect of visual sensation; the other a scientific formula, derived from the experiments of the laboratory; each a very distinctly different category.

It is such a beautiful device of pedagogy, to begin instruction with the normals, and then advance to their modifications. The child is expected to outgrow the taste for this nourishment, after he has had his fill and assimilated the food. But does he? Alas! his color ideals are derived from his first lessons. After playing with colored balls, working with colored papers, drawing with wax crayons, always using the same fixed hues—color comes to mean the unvarying qualities of the given normals.

What wonder that the sky is thought to be normal blue, and the trees normal green, and that every thing of chromatic beauty is seen thru a false mental color screen?

Seeing color is experiencing a sensation which acts upon the emotions, affecting the individual pleasantly or otherwise. The qualities of the normals, by their very nature, must jar upon the sensibilities of the child; and when all color expression, by means of pigments or with stuffs, is limited to these particular hues thru a period of early school life, the effect cannot help being disastrous.

That the child appears to enjoy his work and that the product seems to justify the instruction, is no proof that the method is not objectionable. While some supervisors have departed from the old way, the great army of teachers thruout the country are still unacquainted with color in its true sense, and color instruction is apt to be more of a detriment than of an advantage to the pupils.

Visit the schools where the old order prevails. It will be difficult to determine the grade where the transition from the study of the normals to the study of their modifications occurs.

See the desecration of our beautiful California poppy, done in normal hues. Observe the normal red apple, the normal yellow banana, the normal green cucumber, the applied design, the maps, the flags, the blackboard drawings—not to speak of the characteristic wall decorations that accompany this scheme of instruction—all warring with each other, causing a riot of contending vibrations, that make us writhe, as they bombard our helpless eyes.

To cultivate the function of seeing the appearance of color, the eye must be constantly exercised, both in perceiving the qualities of single colors and in discerning their conduct in their various relationships. It is not so much knowledge that is desired as power; and for this power constant practice is necessary.

Not only should the children work with well-chosen color in all kinds of materials, but they should live in an atmosphere of refined color where they may unconsciously imbibe its beauty and early acquire true standards of color qualities and values. No one will dispute this statement, but as to what constitutes beautiful color and true standards is an open question to many.

Color judgment should be developed by the study of both nature and art. The creative imagination acquires but little from nature unless fostered by the constant association with art. It is by means of the latter that the subtle beauties of the physical world are revealed to ordinary eyes.

To advance in art, there must be art examples for study; to learn to see color, there must be plenty of it.

More and more art will be needed in our educational institutions if our children are to be given the kind of education which is to equip them to take their place in the industrial and commercial affairs of the nation's future. Not only should our schools be better equipped with all kinds of examples of art, but our school superintendents and principals should make an effort to learn something of this new education and not leave it entirely to the teachers and art directors. It is the superintendent who creates the conditions of the school department, and when he enjoys the advantages of art culture there will be a corresponding atmosphere in the community over which he presides.

It is not my purpose to discuss "easy methods of teaching color" nor even to define devices and explain systems. Too long have teachers depended upon such resources, while striving to teach a subject which is unknown to them. Instead of resorting to prescriptions of various kinds, they should study the subject. "Educational Art," or "The Formation of Taste"—of which color is an important factor—should be included in

every course of instruction, whether it be intended for children or for the preparation of teachers.

But some one says, "Where and how are we to study?" Seek the expert and take lessons as you do for any cultural subject. Use the museum as you do the public library. "There is none." Then agitate the acquisition of one, for it is a necessity to the community. Haunt the shops where the arts of the Orient may be seen. Strive to grasp the peculiar charm of Persian rugs, Chinese porcelains, and Japanese brocades and prints. If possible, collect a few—even if at a great sacrifice. Place them where they may play upon your eyes, and unconsciously become your impersonal instructors. Follow the lead of the art workers of this decade, who are turning to the East for fresh inspiration. In this field of research may be found high- and low-keyed color schemes, producing rich and vivid as well as subdued and quiet effects, but never a palette of the six normal colors.

The wonderful blue described by the Chinese as "the blue of the sky after a summer shower" is never normal. The flame and coral reds of Japan may vie with the hue of the setting sun in its manifold variations, but they never reached the cold crimson of the Occident until the introduction of the kindergarten.

Those of us who attended the Chicago Exposition remember with grief the Japanese exhibit, where, adjoining a wonderful collection of beautiful designs, was placed the kindergarten display. In one case there were inimitable patterns in unexcelled color harmonies; in the other, severe geometric forms garbed in the discordant normals. It did not take much color knowledge to see the difference between the two systems, and the common expression heard was, "What a pity!"

The kindergarten is a noble institution, but, like all human inventions, it will change and adapt its methods of instruction to the more advanced thought of the times. Since it first came into notice, ideas, not only of pedagogy, but of art and of æsthetics, have changed very materially. Its most progressive advocates are beginning to question the original scheme that pertains to color, recommending that it follow the lead of the higher schools, and apply some of the principles expressed in the best examples of oriental art.

Color is the language of harmony, the ultimate goal of all humanity; but it is so misused and abused that it too frequently is the vehicle of discord. No teacher ever knows this subject until she is able to live it everywhere and in every respect. This means in her attire, in her apartment, in her schoolroom.

It is said, "A man's power is expressed in his greatest achievement but his taste is determined by the smallest violation of its canons." To tolerate an inharmonious color spot anywhere signifies that the observer is not disturbed by it, hence his color sense is as yet in a very elementary state of development, and seriously needs education.

To outline a plan of work for the kindergarten is beyond the province of an art supervisor of the elementary schools, as the conditions governing the two grades of pupils are so different.

The most important question to be considered is that relating to the particular palette which is to be given to the children. When this is answered others will follow, such as: Shall this palette consist of a scale having a definite number of colors, or shall the colors be unlimited? Shall these colors be the standard normals, or a scale of either high- or low-keyed hues? Shall the same scale be used in the materials of the different gifts, that is, designed for the pigments, or shall they vary? Shall the children use color spontaneously as a means of pictorial language expression, or shall the work be directed, either as dictation or imitation? Shall they use paints, or a pencil of dry color? Shall the colors be used as prepared, or shall the children mix them? Only the kindergartner who not only knows the child but also the subject can answer. By her who is first fitted by nature and then equipped by adequate training must the problem of laying the foundation for a fine color sense in the next generation be solved.

IN MEMORIAM—MILTON BRADLEY

A. L. WEBBER, SPRINGFIELD, MASS.

The measure of a man is his achievements. What he has tried and what he has done, are the blocks with which his monument is builded in the field of posterity. To think, to plan, to accomplish things that are great and good—not for his own reward, but that some part of humanity may find life better and sweeter—these are the qualities that mark man's greatness, that make his name honored and his memory cherished.

Qualities such as these characterized the whole career of Milton Bradley, whose death, Memorial Day of this year, removed a revered and widely known member of this association. His was a life of inspiration and activity for good, which, tho primarily exerted in the world of business, was so closely allied with educational works and progress, that it is meet and fitting that appropriate tribute be paid to his memory at this gathering of educators who, most of all, are familiar with, and appreciative of, his work.

From the narrow environment of a Maine village, Milton Bradley's life developed and reached out into the field of practical education, growing into a power that influenced the teaching of little children thruout the English-speaking world. From the time when, thru his meeting with Elizabeth Peabody, he came under the spell of Froebel's philosophy until his retirement from active business, his whole ambition and energy were spent in the adoption and provision of means for making possible the practicable application of Froebel's teachings to the school system of this

country. In the embryo days of the American kindergarten, its most ardent advocates were at a loss how to overcome the obstacles which constantly presented themselves thru lack of proper material. Froebel wrote of the "gifts" and their uses, but the knowledge gained from his teachings could not be applied because no "gifts" were available.

It was Milton Bradley who solved the problem of their manufacture. It was his ingenuity that invented machinery to produce these and other kindergarten materials, the like of which had never before been seen in this country, and for which no facilities to manufacture existed.

Thru the publication of Wiebe's *Paradise of Childhood*, Milton Bradley gave to the kindergarten cause an impetus that eventually placed it on a foundation of permanency. And bear in mind that all these undertakings were carried out thru the strength of his convictions and love for the cause, despite strenuous opposition from his business associates, who realized their futility from a commercial viewpoint. Many years passed before there were enough kindergartens to make the manufacture of materials even a partial success commercially; but the zeal of the manufacturer knew no abating.

The teaching of color is so universal today that a thought is seldom given to its original source, yet the definite nomenclature we know so well, carrying the pupil from kindergarten to high school, emanated from the fertile mind of Milton Bradley. It was he who standardized the colored papers of the kindergarten, followed by the crayons and water colors for the primary and higher grades. Of Milton Bradley's early work in color, Henry Turner Bailey has written:

> When I first met Mr. Bradley he was beginning his experiments in color. It was he who first saw the value of colored papers as a means of training the color sense, and as a means of expression in design, and it was he who spent money freely, who instructed and watched the paper-makers day after day, week after week, month after month, until they turned out what he wanted. I recall his dark room with its quivering spectrum of glory, ten feet long; I remember the patient experimenting with the Maxwell disks which resulted in the perfecting of the color wheel; the long discussion which preceded the classification and definition of the five harmonies of color as set forth in Mr. Bradley's book on *Color*, a pioneer in its field.

Milton Bradley's interest in education, however, was not confined to kindergarten work. It was he who promoted the study of manual training, and who provided the materials and instructor for the first manual training school in Springfield, Mass., one of the first of its kind in the country.

Milton Bradley's educational influence reached the home as well as the school. He devised and published many pastimes, called "Home Amusements," in which the educative element was strongly apparent. In this field, also, he was a pioneer.

So much for his work; and what sort of a man was it who accomplished these things? Many tributes have been paid to Milton Bradley, the man, by those who knew and were close to him. I quote once more from

Henry T. Bailey, who was intimately associated with Mr. Bradley, and who expresses his appreciation in these words:

> Mr. Bradley impressed me as being first of all an honest, open-minded man. He welcomed more light upon any topic he was studying, no matter whence it came, or how pitilessly it revealed the imperfections of his own thought.
>
> Mr. Bradley was a promoter of human beings. I learned to know how large a proportion of his trusted men he had taken into the shop as boys fresh from the public schools. He was always glad to make the acquaintance of a young teacher, a new man, anybody interested in education, to encourage and help in every possible way anybody if he were only honest and serious. I could give many examples of this, which have come under my own observation.
>
> Mr. Bradley was a tireless worker. He had visions, endeavored to realize them. Once having determined on a course of action, he held to it no matter what obstacles appeared, no matter what opposition developed, and therefore he was successful.
>
> Mr. Bradley was a happy man. He rejoiced in his home, in his church, in his business, in his friends, in the ever-increasing opportunities for service in the realm of education. He was an optimist; he radiated hope and good will to men.

This voices the opinion of all who came in contact with him, many of whom have reached high places in the educational world. One of the most sincere and unusual testimonials (and one which I doubt has ever been paid to another man), however, is to be found in Oak Grove Cemetery, Springfield. A short distance from the main entrance stands a plain stone of white marble on which is engraved the name "Charles King," with date of his birth and death; and, just below, the epitaph

SIXTEEN YEARS WITH MILTON BRADLEY

a phrase that speaks a volume!

THE KINDERGARTEN: ITS INFLUENCES UPON HIGHER EDUCATION

RICHARD G. BOONE, LECTURER IN EDUCATION, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

In a very recent educational work of more than one thousand pages by a university president, and one of the leaders in such discussion, the first chapter of forty pages is given to the "Pedagogy of the Kindergarten."

Among the topics are the ideal kindergarten; its value as a means of educating young women; Froebel as a seer anticipating modern ideals; the training of kindergarten teachers; and the great ideas which the world owes to Froebel: that he antedated the modern discoveries in embryology; that the child recapitulates important stages in the race's history; that feeling and instinct are primary, and germinative of intellect and will; that thru the play instincts man first becomes creative; that he believed in the original soundness and wholesomeness of human nature; that during the animal stages of his being the child should be a complete animal as the condition of his highest maturity on the human plane later; that the only test of state, home, church, school, or civilization is whether or not it

brings childhood and youth to the fullest maturity; that a wholesome intuition in the teacher is to be preferred to an elaborate methodology; and that a belief in sound health is one of the tenets in every educational creed—all of which have been incorporated into the accepted pedagogy of one or another of the stages of directed education.

The same author characterizes Froebel's *Education of Man*, as—

> one of the best and most nourishing of all infant foods for novices in the speculative field, a book which will and should be dear to all women's souls, not so much for what it teaches their intellects, as because it makes them feel so profoundly the burden of the mystery of the nascent soul, and shows that this insight and function are central and cardinal in the universe.

It is the fate of new movements, and especially those of far-reaching import, to be misunderstood. Those of Comenius, Pestalozzi, and Froebel are only more notable modern instances. Froebel was and remains particularly open to misinterpretation.

The writer quoted above, on a sympathetic page, speaks of Froebel's "nebulous speculations which were bred by the *Zeitgeist* in the natal age of German philosophy, and by the great idealistic movement which accompanied the birth of this puissant nation." His weird and bizarre version of this metaphysical ferment was a unique

> culture bouillon, concocted of various ingredients: theosophic mysticism, foregleams of evolution, a passionate enthusiasm for nature just as the great scientific movement was dawning, and love of childhood.

It need not seem strange that not only among foreigners but also among his own people he was often, generally, misunderstood, or half understood, and by some held in derision. Indeed earnest readers of Froebel may be grouped in three classes: those who will have none of him; those who are his devoted disciples and take him whole; and those who see in the substance of the *Education of Man* an expression of determining tendencies which modern education is maturing. It is my privilege, in a half-hour, to characterize typical forms of these tendencies, and find their counterparts in the current educational life, and in our American social life.

The *Education of Man* was written after ten years of teaching, and a dozen years before the kindergarten took either its name, or its form of even adolescent maturity. Out of two hundred and fifty pages, thirty pages are devoted to "man as child"; twenty pages, to "man as boy"; and two hundred pages to "man as scholar." This first important contribution by Froebel was not primarily a treatise on the nurture of infants. But shot thru the work of the fabric of his childhood training, were the constantly recurring intuitions of the basic importance of care in the earliest years, like the woof that gives pattern and color and meaning to an otherwise aimless structure. To the last of the two hundred and fifty pages of the *Education of Man*, the importance of the right training of infancy grew upon Froebel, and it led a few years later to his converging

interest and effort upon the kindergarten age. He saw, as few of the teachers and reformers of the present day even have yet come to see, that "the child is the focus of interest for every kind of a social and humanistic study." All shaping of purposes, and the recasting of society and ideals of legal and moral justice and human rights must take their rise in the child and in his nurture.

It is not my purpose here, at all, to discuss the kindergarten as such; but to trace, very briefly, its influence upon other parts of the school system, and upon doctrines of education as applicable in after-years, and their reactions upon the common life.

Not forgetting other principles, but disregarding them for the time, I venture to remind you of three Froebelian dicta that have had a positive shaping influence upon elementary education.

The first is that learning not only *may* be or *should* be, but, if effective, *must* be consciously connected with, and grow out of, the experiences of the life being lived by the learner; bromidic enough as a mere statement, but painfully unfamiliar in most school practice.

A second germinative conception is that of the importance of the knowledge and habit of co-operative intercourse; the socializing of the individual, fitting him to count for *one* in an institutional life.

And thirdly, there is the increasing recognition of the value of creative work over mere copying or unquestioning acceptance—an ever-present correlative of the last factor.

No one who is even superficially familiar with the *Education of Man* or the other Froebelian literature, either by the projector of the system or by his disciples or critics, will doubt that these are factors in the distinctive kindergarten training: current ideas and ideals, the home and economic interests, prevalent codes and behaviors, contemporary interests, neighborhood achievements and local institutions, occupations, amusements, and arts—all are drawn upon as raw material for shaping interest and purposes in the little ones. In a similar sense, typical exercises of the kindergarten look to socializing the child, linking his interests with others and fixing the habit of sharing with his fellows; in all of his social doings taking others into account; finding his dependence upon companions matched by his ability and disposition to offer wanted service. And nowhere, in all the range of schooling, is more emphasis, and intelligent emphasis, placed upon individual initiative, and first-hand effort, the ability and disposition to plan, in however simple a way, than in the kindergarten.

Now, however these may be found to work out in practice, they are all accepted theoretically as valid principles in the teaching of the grades up to the high school. More and more the curriculum of the elementary school has been enriched by a crop of nature and earth studies as a means of understanding and interpreting existing arts and industries; the inter-

relations of the social and economic life; by civic and municipal studies; the vital calculations of the shop and the store; by exercises of social and civic habituation; and training in design, construction, and the more independent adjustment of means to ends.

In American schools especially, a large majority of whose pupils receive no further schooling, and few of whom get any training for specific vocations or industries, it becomes particularly important that they acquire, not only a mastery of the book and language as the means of both intelligent social intercourse and further learning, but the ability and habit of vitalizing the daily activities by all the fund of learning they have; by a sense of common social interests and a share of responsibility for the social good; and by such training in self-dependence and personal initiative as makes standing alone easy if standing alone becomes necessary.

In order to see a connection between the common recognition of these principles by the kindergarten and the subsequent classes of the elementary school, it is not necessary to argue that the schools derived them from Froebel or from the kindergarten. Their more general introduction into the practices of the kindergarten, and their easier application there, have stimulated their adoption as working principles in all grades of schools; have immensely broadened the modern conception of an education for the masses of the people whose schooling is foreshortened, and have opened the way for using the child's instinctive interests in activity and in fruitful companionship to fit him for a future of responsibilities and intelligent service in which the instincts shall be less dominant.

Dr. Dutton, in characterizing the "Modern School and What It Owes to Froebel and Herbart," says: "In a complete statement of what the kindergarten undertakes to do for little children, it would probably be found to contain the germ of every reform now being attempted," and names "various elements found there which are all capable of being developed in a greater or less degree during the entire school life," the sympathetic teacher for whom we are primarily indebted to the kindergarten; play, games, and the song as means of expression; story-telling from folklore to the picturesque presentation of great historical movements; the first-hand interest in, and acquaintance with, things and their behavior, as the initial step toward science; concrete relations in mathematical training; the "occupations" of the kindergarten as a true introduction to manual training; facility in the use of the mother-tongue as one means of expressing a real inner experience—all of which represent one or another of the influences named as touching the elementary school and shaping its teaching.

But the vitality of the so-called kindergarten conception of education is quite as obvious in all higher education.

The emphasis that is put upon the learner as *one*, an individual with more or less exclusive aptitudes; interests to be conserved and stimulated;

a fund of energy that shapes both his growth and his rate of growth; his own particular type of efficiency, as having intellectual and moral rights as against another, or others, or all maybe; a free spirit whose first right is to find an adequate expression of itself: this, in the conception of Froebel, it is to be educated. Not in the kindergarten only, but in schools of all grades, it is coming to be recognized as measurably true that lessons, and privileges, and ideals of responsibility, and achievements are to be shaped by the personal characteristics and native faculty or lack of faculty.

A recognition of the varying claims of sex; inherited family and class biases; precocity and sluggishness; vigorous health and a weak body; the motor- and the sensory-minded; the vivid, or heavy imagination—all call for more or less manifold courses and varying options; for a regard for particular needs, and selected stimuli; for yielding standards, high as each can reach—but for *each;* and an attempt to equip for the particular service or joy or efficiency for which he possesses faculty.

In times, all down thru the ages, this ideal has found acceptance by great minds who saw clearly, who believed in the soul's unshared responsibilities, and who had faith in ideals as too sacred to be chopped into shreds of mere partnership. But for its effective presentation as a working principle in the schools, educational practice is indebted to the founder of the kindergarten, or more accurately, perhaps, to the general movement toward a positive individualism, of whose meaning for education Froebel was the chief exponent.

Like most good things, it is a principle that is easily abused in application. But it stands opposed to all uniformity in matter or method for the sake of uniformity; to all martinetism in the control of conduct; to all platforms and philosophies; to fixed class distinctions; to imposed curricula; and to any training that merges the individual in the mass, so that he no longer acts as an individual but as a part.

In American life and, antecedently, in the American school, this individualizing tendency shares with the socializing tendency the position of focal interest in public significance. How to stand for *one*, and yet work co-operatively with one's fellows for the good of the whole; how to respect one's conscience and join with others in an organized effort to realize a common creed; how to conform to exacting conventional standards of social intercourse and maintain a high level of self-respect—are not easy; but the lesson must be learned and, for the most part, must be acquired in the schools. The home life is, for most persons, too narrow to accomplish the task; the law too unyielding, or apologetic where it should be firm; the prohibitions of the church too abstract and remote from life; and politics only tardily responsible; so that the burden is more and more laid on the school to harmonize in any purposeful way these seemingly conflicting imperatives of social efficiency. Nowhere is this better done or begun than in the kindergarten, and among the agencies that have

shown themselves willing to take suggestion from the practice of the kindergarten.

All sorts of teamwork in which the achievements of the group depend upon the loyal, efficient work of each: student co-operation, and where possible, student initiative in the management of distinctly student affairs; a stimulus to high personal endeavor with a constant and wholesome reference to the claims of the group; and intimate handling of concrete problems of civic and historical and social forces at work, and the resulting movements, are important means at the call of secondary and higher schools for working out a harmony of these two apparently antagonistic ideals. In every good, real kindergarten, practice in such training is attempted, and with more or less success achieved. In many of the better elementary schools this is the ideal, and in more of the high schools perhaps, but in the true kindergarten it is the daily order. For inspiration in the effort to fit the individual to share in the functions of an institutional society, and to find it a means of the fullest self-expression, we must look to the kindergarten, as having proved its faith by its works.

To have produced a community of individuals capable of co-operative effort such that none should suffer and all should share, would greatly exalt both the group and the school.

With respect to no other one academic interest does the contemporary best school differ more from traditional schooling than in a recognition of the importance of the first-hand studies—whether in the secondary school or in the college. This is a phase of the general enlargement of the function and field of science and the method of science, as worked out in the last century. But the influence of Bacon and his immediate followers upon general education and the teaching of the schools was almost nil, until well along toward the middle of the last century, in the movement which found its best normative expression in Pestalozzi and Froebel and the reorganization of schools from below and not from above. Crude as were the first efforts at nature-study and object-teaching, they led to real studies, lessons in the field and the inquiry of things themselves as to their behavior; not at all for the purpose of extending the field of knowledge, but as furnishing a sure method of learning, and a basis of experience for future use in reflection. The teaching of physical science in secondary schools, so marvelously reinforced in recent years by the reactions of the college and the university, at first waited upon the stimulus derived not from the lessons of the schoolroom, but from the teaching of the philosophers—Comenius, and Froebel, and Herbart—that such studies are basic at any stage of instruction. This has revolutionized the teaching of most subjects, even the languages and philosophy and the humanistic studies of history, economics, ethics, of arts and religion.

All this makes for independence of judgment, because it rests upon self-achieved experience. It makes equally for independence of citizenship,

and intelligent morality, and all helpful neighborly qualities. It makes one to be a true *cause*, and not a mere *effect*, among his fellows. The habit of dealing with realities of one's own discovering, the temptation to be content with shams and pretenses and mere phrases, prompts an effort to get at the real meaning of creeds and laws and platforms and civic and moral obligations.

There are not lacking, also, signs of the kindergarten influence even in the college and university. "It might be a watchword of most educational reforms now needed," says the writer first quoted, "to carry the Froebelian spirit, as its author intended to do, up thru all grades of school work, even the university"; and elsewhere adds that "every educator, even the university professor, will profit by a careful study of the kindergarten.

In a memorable address before the American Institute of Instruction, in 1894, Dr. Eliot, then president of Harvard University, under the caption "The Unity of Educational Reform," said "the steady inculcation of those supreme ideals thru which the human race is uplifted and ennobled —the ideals of beauty, honor, duty, and love, are all constituents of education, to be simultaneously and continuously developed, from earliest childhood to maturity."

So convinced was Dr. Eliot of the identity of aim and motive thruout the twenty or twenty-five years of formal schooling that, in the same address, he was constrained to testify that "some of the administrative improvements then lately made in universities, resemble strikingly improvements made at the other extremity—namely, in the kindergarten."

It may be said that selective interest is the basis of all profitable effort. And while the practical application of this is attended with difficulties "In this process of educational construction, so new, so strange, so hopeful, I believe that the chief principles and objects are the same from the kindergarten thru the university." Among these common aims, Dr. Eliot named:

(1) the addressing of instruction to the individual pupil rather than to groups or classes;

and avowed that

the kindergarten *and* the university best illustrate the progress of this reform; (2) the careful training of the organs of sense; (3) practice in grouping and comparing different contacts, and in drawing inferences from such comparisons; (4) the practice of making accurate records of one's judgments; (5) the holding in mind for use these records; (6) training in the power of adequate expression; and (7) the steady inculcation of those supreme ideals, whose principle has its most obvious and picturesque setting in the elective courses and major subjects and special training of the colleges and higher schools, found its first acceptance, except in sporadic cases, in the established and consciously directed practice of the kindergarten; whence it spread, in time, to the colleges, thence down to the high schools, and appears in current elementary education as a practice, in all subjects, of taking into account the child's natural or stimulated want. To throw upon each individual the responsibility—the privilege—of doing what he can do well,

and of wanting to do the needful best, is not only the problem of the schools, of all grades, but of every cultural, economic, and political society. The best results cannot come from doing tasks set by others, but those set by one's self, and cherished as one's own.

From all of this it would appear evident that the kindergarten may not safely be regarded as a device for the training of poor children only, or the families of the working classes, but that it *is* a scheme of education for all—for those who direct; for him who follows and him who leads; for the girls who may be mothers and the boys who may be fathers; for the one who must fill his time with labor, and the other who must make his leisure worthy. It is needed for the capable that their great powers be not wasted; and for the less competent that the most may be made of whatever faculty there remains. It is not an exclusive device for the infant years, but, beginning there, is valid for every subsequent year or age. It stands for universal principles, and faith in human growth. It is optimistic and believes with Emerson that there is that among us which "tends to make the best better and the worst good."

The kindergarten, when not even indirectly the originator, is yet organically interested in, and in entire accord with, a long train of allied movements for the better understanding and the amelioration of child life: the humane movement in all its manifold forms; numerous children's welfare societies, not for charity but for education; for child-labor laws, and juvenile courts, and opportunities for play, and clubs for the young of their own administering, and stimulating interests converged upon them —all of which are incident to the marvelous, much-organized and far-reaching interest in the child, as the true raw material of civilization: an interest that began with the kindergarten, and looks yet to the kindergarten for its chief inspiration.

MORAL INSTRUCTION OF THE CHILD

C. E. RUGH, ASSOCIATE PROFESSOR OF EDUCATION, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

Fortunately we need take no time discussing the importance of each kindergartner holding the ethical aim of education as the inspiring and guiding power of her life and teaching. The present perplexing problem is how to realize this aim in the midst of the present social order.

Stated from the standpoint of means, the present problem is how to conceive the moral development of the child in terms of ways and means available and appropriate in present-day society. Probably the quickest and surest way of developing the educational philosophy for the solution of this problem, is to make a searching examination into, and comparison and contrast of, the life of pioneer parents and children and those of today.

The pioneer social unit was domestic. In labor, in leisure, in joys, and in sorrows, parents and children were companions. Social heredity, social

contagion, and imitation produced moral character suitable to this social group.

The new social order is not well enough defined for us to name the unit of structure, if, indeed, it has one. Social psychologists keep naming "the crowd" as the unit. The name is not important. The fact is perfectly apparent that we are in a new social order. It is just as apparent that the child has been more affected by the changing social conditions than any other member of society. Most children are removed from first-hand contact with Mother Nature as the source of material comfort. Most children, except those forced into child labor, are removed from first-hand contact with the productive industries. Most children are removed from most of the modern social life, for which we may be very thankful. The old-time home is broken up. Children have been removed from companionship of adults. They are now classified on the basis of age, not only in school but in church, in industries, and in society. Three effects of this rapid change need special notice: first, most children lack the sense experience with many of the things that give concreteness and content to our language and literature; second, the new economic order makes it unnecessary and in many cases impossible for the child to think thru from raw material to finished product—a most important kind of thinking; third, the gradation of children, the separation from productive labor, has greatly narrowed the child's social, and hence moral, vision. The child sees and uses moral standards and situations of his grade.

These economic and social changes have put heavier burdens upon the kindergarten than upon any other branch of our educational structure, not only because the kindergarten deals with foundations, but more because these changes have removed the simpler means of a social sympathy. No social change will probably ever put the "three R's" out of the curriculum. The multiplication table, for example, is a universal means of communication. It is a formula, and comes into the formula period of the child's development. The kindergarten, on the other hand, must use the means available for developing social sympathy, and at the same time be the first formal attempt at adjusting the child to the crowd; that is, to a group founded upon neither a natural nor institutional base. Sympathy is the primary social process. The domestic order develops sympathy because there were examples for imitation and recurring situations demanding it. The physiological basis of sympathy is certain reactions of circulation, respiration, and the rest. The psychic basis is consciousness of kind and the recognition of a specific situation. To be able to sympathize with a person or a group, the child must be able somehow to reproduce some of the activities of the person or the group. In order to think and sympathize with a horseman, the child rides an imaginary horse. To think and sympathize with the wood-chopper, the child imitates the motions of the chopper. To think and sympathize with the mother, the little girl

plays with the doll. To some these seem a faraway basis of social sympathy, but they are indispensable. The glory and power of the early kindergarten for moral education came from its following this principle. There have been few finer achievements in educational means than the songs, plays, and occupations of the early kindergarten as a means of developing social response.

Since sympathy in this early form demands imitation and reproduction of acts, the changed social order puts new and heavy demands upon the kindergarten and primary schools. Primitive occupations used primitive machinery and employed the larger, more fundamental muscles in transforming raw material into finished products. Present industrial processes use complex machinery, employ finer adjustments of accessory muscles to make a part or piece of the finished product. Again, these primitive occupations of the domestic order were daily recurrent, and suggestive, and also were associated with known and respected persons. Division of labor and the factory system have eliminated most of the personal elements. The occupations of adults are so removed from the observation of children, and are so complex and piecemeal that they furnish little basis for social sympathy. The songs and games of the sower, mower, wood-chopper, even the shoemaker, have lost most of their significance as means of social sympathy. Whether differentiated factory labor or any present-day general form of industry can be made the basis of imitative songs, games, or occupations as means of developing the physiological and psychic material for sympathy, is yet to be determined. Of course there is left concert singing. This is a social process *par excellence* independent of literary content or dramatic motion. The singers must sing together, have the same rhythm, same movement, breathe similarly, have the same pitch. Individual and social control might here be increased by individual and group responsive singing. For girls the play and game with dolls still remain as ways of practicing for adult processes. Many of the ways Froebel suggests for using nature as a means of developing insight and sympathy may still be used.

But all in all, the child's present status in its relation to nature, to adults, and to industries, is so new, so different, and so complex that the kindergarten and primary school are forced to a reorganization of much of its material. Much of the material used when the social unit was domestic still has educative value because of its historical suggestiveness. But no intelligent educator contends that it has the same social and moral significance.

Moral education can no longer be incidental or indirect. Many customs and social standards are still passed on by contagion and imitation, but the insight and good judgment necessary to live a moral life in the present social situation request definite, direct instruction by parents and teachers who know what they are doing and do the best they know.

Formal education may be described as grafting social achievements upon instinctive roots. The moral life is the response a person, that is, a self-acting, choosing agent, makes to the social order. Moral education aims to make the child able and willing to make right responses. The realization of this aim demands of the teacher: first, a working knowledge of the child's native tendencies; second, a clear insight into the meaning and use of good social standards and customs—an insight gained only by right thinking and right living; and third, such a knowledge of teaching as a fine art as to be able to graft these good standards upon the child's instincts.

The situations demanding moral responses are of two types: first, the formal, recurring ones—for these, habits of right action must be developed by drill prompted and directed by moral motives; second, new and often perplexing situations—for these, the child needs the development of insight and moral judgment, the ability and disposition to think before acting. In addition to the disposition to think around and thru a new situation, children need formulas for analyzing difficult problems.

Moral instruction is accomplished only by a teacher who aims at a moral result. Let this not be misunderstood. A child acquires many habits of right and wrong reactions by the mere example of the teacher, and there is no stage of a child's development in which the teacher's personality is more important, unless, perchance, it is in the child's second or social infancy, from twelve to fifteen. But the moral development of the child of today requires, in addition to these indirect ways, the formal, direct instruction in thinking thru moral situations, and instruction and guidance in acting according to ideas rather than following habits. In short, for many present-day problems a child has no trustworthy instinctive basis, and the ability and disposition for right reaction must be developed thru instruction. The limitations of time make it impossible to train by example and imitation for all kinds of acts. Again, children are thrown upon their own resources earlier and oftener than in pioneer times. The supreme problem of moral education is the development of self-control. This can only be accomplished thru moral motives. A moral motive identifies an impulse with a good end that is the natural result of the act which it prompts and directs. Rewards, prizes, and immunities interfere with moral instruction. From the standpoint of intelligence, the problem of moral education is to teach a child to think straight when thinking about acts and consequences. Artificial incentives interfere with clear thinking upon causes and effects. The invention of artificial means and devices of motivation have been brought about by the inability of teachers to develop motives appropriate to the stage of intellectual development of the child. The use of artificial incentives with healthy children is due either to laziness, indifference, or ignorance. A normal child is a veritable magazine of energy, and is one of the most easily directed organisms in the world. The problem is to develop the power and disposition

of self-direction. In the last analysis, the spiritual life of a child is determined by the number and kind of persons with whom he has fellowship, and the quantity and quality of that fellowship. Now the primitive companionship is with those who feed, clothe and care for the child. We are just coming to understand how sensitive a child is to persons. There are abundant cases of a child's discriminating between mother and nurse, and between father and mother in the early months of its life. It is not too much to say that many a child has the physiological basis of a good or bad disposition laid in the first two or three months of its life. Regular habits of eating, sleeping, bathing, can be established during the first days of life. Sticklers for nomenclature insist on calling this training, but from the standpoint of the mother and nurse who purposes and plans the ways and means of accomplishing this result, it is instruction. Because of the infant's sensitiveness to persons in these early days, a child's disposition is much dependent upon the disposition and habits of the one who cares for it in this first stage. A fussy, nervous, jerky nurse gets from an infant quite different responses from those of a steady, graceful one. In this first stage of response to the natural and social order an infant's standards of right and wrong are what he wants. The transformation of these standards is caused by wanting what a kind person wants him to want. The second stage of moral development, demanding a new means of instruction and training, is that in which the wants are not for satisfaction of bodily appetites, but wants of the mind, at least in the sense of wanting tools or means to accomplish ends. In this stage all the essential moral elements bud forth, but we must remember that they are but buds—the sense of being a cause, the foundation of conscience, of responsibility, the sense of values, the sense of ends and means, the sense of social use, that is, of using and being used by persons. In this stage formal social instructions must begin. Fortunately we are not left to devise the formal means of instruction. The instinct for self-impression and imitation along with the examples and occasions for co-operation develops language to such an extent that social intercourse is not only possible but enjoyable.

If, now, we analyze the social life into which the child is thrown, we discover here as in the former stage the two types of reactions. There are the recurrent ones, and the new ones. The new, complex social habits require both instruction and training. Language is the instrument of instruction, and repetition, or drill under moral motives, the instrument of training. In either case the process must be rational in this stage.

It has been announced more than once in this convention that you cannot reason with a child before ten or twelve years of age. If we cannot and do not reason with a child before this age, we cannot reason very much with him at any age. No one has a right to use the plural personal pronoun "you" in this statement. There are parents and teachers who might with some degree of truthfulness say, "I cannot reason with children

ten or twelve years of age," but this is because of incapacity or disinclination on the part of the parent or teacher, and not due to the irrationality of the child. There are parents and teachers who could with perfect truthfulness say, "I don't want to reason with boys and girls before the age of twelve. I want them to do what I say." Such persons refuse to give moral instruction. They would rather give commands.

We have somehow drifted into the bad habit of putting training and instruction over against each other as alternatives. It is a vestigial remnant of the old controversy concerning the relation of the theoretical and practical aspect of consciousness. In a self-active, complex agent like a child, there is no training worthy the name that is not inspired and guided by instruction. Instruction is the ingoing informational aspect as training is the outgoing expressional aspect of judgment. It is true that with our present system of education there seems to be something akin to information stored in memory that in no appreciable way influences conduct. There seem to be cases of skill that cannot be referred to any articulate body of knowledge; but these are either only seeming or are pathological rather than normal.

There is no moral education worthy the name without moral instruction. This instruction may be nothing more formal than a good example, but an example as a means of moral education is not good, not so good as it can and ought to be, unless it is deliberately and tactfully set up as a stimulus and guide to action.

Instruction involves consciously directed fellowship between two minds. Moral instruction aims to produce moral conduct. Moral conduct is produced by moral intention. A moral intention is a good end consciously and intelligently chosen. Moral instruction in these two early stages of development is accomplished by providing occasions for choosing, occasions for judging, and acting according to judgment. In the first stage these occasions must be accompanied by good examples and all stages require social approval and disapproval.

The confusion in this field arises out of wrong notions of the function of knowledge and language and wrong notions of the relations between them. Language has come to be almost the sole instrument of social co-operation in education. When we speak of information, we almost always think of it as formulated in language. When we speak of instruction, we almost always think of it only as couched in language formulas. This would not be so bad if we all understood the right method of developing formulas and their right use. Formulas have three functions: (1) to organize and store learning; (2) to analyze complex presentations; and (3) to guide action. The controversy concerning direct moral instruction grows out of a misconception of the use of formulated knowledge, and an attempt to reverse the process of teaching a formula. The language aspect of a formula may be run thru the language machinery of a child

without affecting conduct, and without any power to guide action. A formula comes at the end of the primary learning process. It is the refined product of re-examined experience. Such an articulated experience can then be used as a powerful instrument of analysis; and when a formula can be used as an instrument of analysis, it can also be used as a guide to action, i.e., as a guide to life synthesis or social self-adjustment.

All good and great men have left us maxims of conduct. Careless thinkers have often concluded that the goodness is the result of having followed these formulas, whereas it is nearer the truth to say that these formulas are the result of good living. While these formulas are the products of right living, they are also the instrument of prompt and accurate action. Life maxims are as useful to a man of action in the moral world as formulas concerning matter are useful to the natural scientist. Moral instruction, as the etymology of the word suggests, consists in building into the child's life, as it were, the formulas for right responses. For common situations, this means organizing the physiological and psychic constitution into good habits. For complex and new situations, this means constructing the formulas for their analysis, and the correlative formulas for choice and action.

This is the age of science. The mind is a real cause, and the objective world is a real and orderly world. In such a world the danger of producing intolerable prigs by teaching children to reflect upon conduct, are infinitesimal in comparison to the danger of allowing children to grow up into coarse, disrespectful boors, because they do not care or do not think of consequences of action. This prig problem arises out of another false assumption. This false assumption is that reflection upon conduct is thinking about past and bad conduct. Moral instruction is constructive, and consists in getting that good thinking and acting that insures right living in the future. In a complex and progressive social order like the present, direct moral instruction is a necessity.

THE KINDERGARTEN AS AN ETHICAL LABORATORY

EVELYN PLUSS, KINDERGARTEN TRAINING TEACHER, STATE NORMAL SCHOOL, LOS ANGELES, CAL.

There has been no stage in the growth of the world as it is today that has not brought to mankind its problems of adjustment of things and affairs. Upon the wisdom displayed in the solution of these depends the strength of nations. History is full of it. We have the names of these men who have grappled with the things and affairs of their day handed down to us as the great men of the world. For example: Confucius, the great Chinese teacher, who states the problem of his time, 500 B.C., in this way:

> It is because men are prone to be partial toward those they love, unjust toward those they hate, servile toward those above them, arrogant toward those beneath them, and either harsh or over-indulgent to those in poverty and distress, that it is so difficult to find anyone capable of exercising sound judgment with respect to the qualities in others.

Confucius adds as his solution of the problem:

> Therefore it is the part of wisdom that we immerse ourselves in our own affairs, in order that others may attend to theirs—

probably a very wise conclusion at that time and in that place.

We might follow the growth of various nations to what they are today by their consideration of responsibility of the individual to the social whole: the Hindus, Persians, and Egyptians, whose individuals are lost in family, caste, and nation; the Greeks and Romans, whose individuals asserted a claim, tho their chief aim was to produce good citizens; the Israelite's consideration chiefly of his relation to his God—the Israelite has no country. Christianity has played a great part in the development of many nations by its opposition to all external distinctions among men.

Thus has humanity ever struggled to meet and adjust its various phases of life. The world has broadened and new needs have arisen. We have volumes written of man's efforts to master these and himself. The greatest men of any nation have been those who have offered the best solution to the difficulties presented. Probably no one will dispute the statement that the greatest problem before us as educators at this time is the moral development of the boys and girls in our schools today because they will be our citizens tomorrow; to develop the moral individual who wills to be, himself, a strong member of the social whole, to give his best of physical and intellectual strength; in short, to lead the individual to his greatest good to himself and to his country.

Considering conditions as they exist in America today, would it be the part of wisdom to immerse ourselves in our own affairs in order that others may attend to theirs? Is there another country in which co-operation and interdependence play so great a part in the every-day life of all as in America? Great changes have come to us within comparatively few years—the homes of a generation ago with their uplifting tendencies and moral protection have been so changed by the inrush of foreigners to our land, thru the great growth of our cities, the flat and apartment houses being substituted for the home, and the general change in the form of domestic life, that they have grown less and less responsible for the details of child training. In the rush and hurry of modern life, moral as well as intellectual culture has become more and more a part of the educator's duties.

Culture—the result of training, disciplining, refining, and enlightening the moral and the intellectual nature of man—is the process by means of which the individual rises above his environment and it is just this which creates a new and better social whole. I know not whether I am alone

in my belief that if the physical and intellectual powers of man be properly nurtured, the spiritual can but be the best.

Physical life is protected, nursed, and subject to strict discipline, because its strength determines the utility and the welfare of the individual—muscular training in the interest of general culture is becoming more and more universally understood to influence the entire organism of man. All mental powers and processes have a physical base—who would make most of man intellectually and morally must not neglect his body. As an example of the intellectual side, take the underlying thought in Froebel's mother-play game of "The Target"—perfect material, balance in form, good workmanship, produce a useful article to be sold for a proper price—a simple example of perfect moral balance in trade life, showing justice in the ethical world. Emerson says, "The soul which within is a sentiment, outside of us is a law." Cause and effect must enter into every bargain—the spiritual compensation must show us the difference between true and false values in both the trade and the ethical world. There is a law in California which says that "instruction in morals must be given in all grades and classes during the entire school course."

The question as to how has been asked by many and answered by few who disagree on many points. We must consider the child, the social whole, and the adaptation of each to the other. The task is a great one: to lead our boys and girls to possess that strength of character which will enable them not only to see and know the world at its best, but to will and to be of the best in the world.

Dr. Palmer defines ethics as "comprehension of moral principles," making his statement plainer by adding:

> Ethics are related to morals as is geometry to carpentry—the one is a science; the other, its practical embodiment in the former consciousness, is a prime factor; from the latter it is often altogether absent.

So, considering ethics as the essence of moral law, how shall we best deal with it in our kindergarten? We should use as one base an appreciative recognition of the process of growth in the child, who must become familiar with his race and the relations existing between him and the external world, become conversant with the nature and relation of all things that influence human happiness and usefulness. He must also become skilled in all the modes of expression by means of which one human being communicates with another and adapts himself to this world. The kindergarten takes the child in the awakening stage, guiding his love and loyalty, his entire emotional nature in right channels. Both the individual and the social phase must be kept constantly in view, cultivating each with reference to the other.

The kindergarten stage is that of instincts, the formative period, the foundation of his later life of habits of thought, habits of speech, and habits of action—the stage of activity of mind and body; the greatest

period of struggle for freedom to master his own body and to know the world about him. From this struggle he masters the social whole as he sees it, and becomes one with it. How important then the guidance at this time; that he be given the highest ideals; be led to see simple and true relations in the world about him; be helped to overcome his weaknesses and encouragement be given his inspiration.

The beginning of all training is response—the beginning of all moral training is response to spiritual atmosphere. The power to do leads to the power to be. As instructors we must be what we would have the children be, because the spirit from within us marks our personality and determines our influence—the atmosphere which we would create. This then is the kindergarten keynote—the child masters all that he will ever know or be thru his own activity, not by what he produces but by his effort to express what he has grasped from the world.

Kindergartens are fitted with furniture for the comfort of, and with various play materials of various sorts to aid in the unfolding and development of that self within each little one who comes within its doors; also with a director to guide his activities to the discovery and unfolding of all the powers which live in each one. There may be gardening—there should be much of it, also plenty of free and outdoor play where it is possible; but the best of all is the children themselves. The kindergarten is in itself a small community of equals, where each may learn to know himself and this little world, and as he knows he grows and adjusts himself to this environment.

Public opinion is quite as much master here as in the world of grown ups. The child placed in the kindergarten is with children of his own development. All are socially equal, tho there are shy ones, timid ones, selfish ones, self-assertive ones, and, not infrequently, untruthful ones also. Let us hope they are all there, for they are needed if in each one we would develop a well-balanced character.

Thru association with the group under guidance of the director each gains in qualities from the others. The timid child gains courage, self-control, tempers the self-assertive child. While self-assertion is required by the shy child, selfishness is eliminated by putting in its place a feeling of joy in sharing with others; while untruthfulness is corrected by knowing right ways. Stronger and more valuable than all these is the sympathy and service which grow in, thru, and from this little community-life.

There are songs of home- and family-life, of trades, and of nature, that lead the child to feel and think; stories which give to the child vicarious experiences outside his sense-perceived world. Especially valuable are the expressions of primitive life in mythology and folklore. The child is prepared for the simple ethical standards of the myths and old tales before he can safely meet the more complex problems of the literature interpreting modern life. We have also conversation which draws from

different children their store of knowledge to be added to our whole, and games that give the best of opportunities for showing justice and fair play in a most general way. The game may be the very simplest circle game and yet each child can but feel the equal rights offered him if he only do his part, or it may be a representative game in which to these would be added sympathy with, and a greater respect for, that phase of life, represented in the little drama, whether it be a member of a bird family or workman that the child has been in the little play.

All games are merely organized play—the law of the game controlling all who participate. Their value in child welfare is being proven in the playgrounds as well as in the kindergarten. The play materials in the kindergarten, correctly used, not only lead the child to creative use of these materials, but give him the power to do something with whatever is put before him. The child must gain confidence in himself, be given ideals and standards, adding more and more as he gains knowledge and experience. Thought, will, and action should be one.

Response is the main thing. The child's response to material will lead him to discoveries which are new to him and should be respected as such. Gardening, too, gives an unlimited field for cultivation of right principles with its beautiful illustrations of cause and effect; its lesson of environment and the never-ending mystery of the power in unseen forces.

We may guide the child thru what the race has struggled alone to gain. He must rearrange and readjust to present things in a new way. He must rediscover the world. Everybody meets the universe in a different way and makes a different thing of it. It is only thru knowing himself and the world and thru recognition, sympathy, and participation in the things and affairs which concern his fellow-beings that one may be led to the profoundest ethical relations of life. We must think of this end in the beginning, keep the principle in mind, and make use of art, music, literature, trades, games, nature—whatever is at hand, as devices merely—as means to this end.

THE KINDERGARTEN AS A FACTOR IN EDUCATION FOR EFFICIENCY

BERTHA M. MC CONKEY, SUPERVISOR OF KINDERGARTENS AND PRIMARY SCHOOLS, SPRINGFIELD, MASS.

During recent years the attention of educators has been centered upon the more practical phases of school instruction, and much thought has been expended upon the revision of courses of study in order to meet the popular demand for a scholastic training that shall be at once broadly cultural and definitely practical.

With a view to the wisest ultimate expenditure of public funds every department of the public-school system is being called to account by

practical men of affairs who are asking insistently, "How does this or that feature of school instruction contribute to the child's education for efficiency?" The question would be easier to answer were there a universally accepted definition of the word "efficiency."

If by efficiency we mean all-around capability, adaptability, and potential power, and not merely mechanical skill along certain narrow lines, the clamor for manual education does not constitute a menace to our broad and democratic system of public education. But if, on the other hand, the pressure of modern business conditions should tempt us to reorganize our schools so as to train children from early youth with a view to making them narrowly efficient in the vocational world, the loss would be vastly greater than the gain. That the man is greater than the artisan, the workman than the work, is a fact that must be recognized in a democracy.

A child should be given every possible advantage by means of which to prepare himself for the great business of living before he is encouraged to concentrate his attention and effort upon preparation for a particular trade or occupation. The "short cut to the dollar" is not necessarily the best and happiest avenue to life. Education should "first render fit to live, and then assure a fit living."

Childhood is the formative period of life, when the perceptive powers, the social instincts, the emotions, and the will seek exercise, and expand in proportion to the opportunities afforded for their development.

It is one of the functions of the school to prolong the period of childhood, and to develop in children the strength of body, mind, and spirit that is necessary to successful achievement in later years, by means of physical and mental activities suited to each stage of growth.

From this point of view the training of the kindergarten is as necessary in a child's development as the highly specialized training of the vocational school, which must be given much later in life. To the suggestion of would-be economists that the money now being expended for kindergartens in this country had better be applied to trade schools, reply may be made that the general all-around training of a young child's powers, afforded by a good kindergarten, may mean quite as much to his success and happiness in adult life as the acquirement of the rudiments of a specific trade or avocation.

Why, in this case, should Peter be robbed to pay Paul? Surely upon no other ground than that Peter is undeserving of the confidence of the public and has but poorly fulfilled his trust. That such a view of the case is unsupported by evidence is conclusively proved by the fact that out of 92 cities in the United States, having a population of 40,000 or over, 86 have kindergartens. And out of 72 cities that returned answers to the query, "Have kindergartens ever been abolished in your city?" only three cities made answer in the affirmative, and in two of these three cities kindergartens have been re-established and are now in successful operation.

The letters received from school superintendents, in response to a questionnaire regarding the conduct of kindergartens in various cities, give evidence that this system of child training, providing as it does large opportunities for the exercise of self-control, kindness, generosity, and sympathetic understanding of the rights and needs of others, as well as for a harmonious development of all a child's powers, has made a unique place for itself in our system of education.

The necessity for a kindergarten may possibly be questioned where parents have the means and the will to supply an equivalent training, and where the importance to a child of early association with other children, under right conditions, is definitely provided for in the home. But when children are left to the care of servants, or when the mother of a family is too busy or too preoccupied to supervise, personally, the work and play of its younger members, the school must supply the deficiency or the children will be defrauded.

There are comparatively few mothers who find it possible under the pressure of home and social duties to maintain the sympathetic, self-controlled attitude toward children that is maintained by the kindergartner who has been trained for her task. And it is a difficult matter for any home to provide children with such opportunities for progressive and educative activity as are afforded by a properly equipped kindergarten.

The neglected child, the "only" child, the lonely, selfish, or wilful child, even when the latter is surrounded by every luxury and refinement that wealth and culture can afford, all need to be brought under some strong socializing influence while they are in the plastic period, when habits are readily formed and conduct most easily influenced. In the case of children of alien peoples, who must be taught a new language and must be prepared for life under new conditions, there is no more potent or more effective educational agency than the kindergarten with its atmosphere of love and beauty and its opportunities for self-expression.

A further suggestion is offered by short-sighted economists to the effect that money may be saved for vocational schools by delegating to the primary school in well-to-do city districts many of the functions of the kindergarten, and establishing day nurseries for the children of the poor.

At best such a substitution would be merely a makeshift, for no primary school can perform its own functions and those of the kindergarten. As well may the trade school attempt to give to its pupils the elementary instruction in reading and writing that should have been given earlier in the grades.

To provide day nurseries for the children of the poor, and substitute the primary school for the kindergarten in all districts where the people are well to do, would be to lose more than anyone who is not a close student of kindergarten methods and results can possibly apprehend.

The kindergarten is not an experiment. It has come to stay, for it

meets a need that no other agency can meet so well. It lays broad and deep foundations for virtuous and effective living and cannot therefore be spared from any complete system of education. It is no nearer perfection than the college or the high school, but it is growing each year in efficiency, and already many practices to which its critics object have been abandoned by progressive kindergartners. Occupations which have a tendency to strain the eyes or the nerves of children, such as cardboard sewing, fine weaving, the stringing of small beads, and construction with peas and sticks, have been replaced in a majority of the modern kindergartens by work with materials that are much larger and much more easily manipulated. For example, very soft, large-sized crayons are used instead of pencils for drawing and coloring; free paper cutting is taking the place of the old-time cutting to line, and much of the construction work is with blocks of large size with which stable and satisfactory structures may be reared, structures that when completed stand firmly in place upon the floor and the building of which brings into play all the larger muscles of a child's body.

It is true that a primary teacher is now and then heard to complain that kindergarten children are restless and inclined, as one mother expressed it, "to dance the carpets off the floor"; but the majority of first-grade teachers testify that when given work that calls for the exercise of power the child who has had a year in a kindergarten gives practical evidence of the benefit derived from his training. Such a child is apt to be bored by work that is beneath his ability, but he is more responsive, more ingenious, and more helpful in his human relationships than the child who has entered the grades without this preliminary training. Whether he passes thru the grades more rapidly than his neighbor is of less moment than how he passes thru them, and what he is when he has finished his school course. How much does he get out of his educational work? What does he contribute to life and to his school? What is the result in general efficiency? These are more important questions than, "Did he pass the examination and reach the high school in advance of his mates?"

The friends of the schools, by suggestions based upon a sympathetic and intelligent study of conditions, and by constructive criticism, may do much to improve them. Open discussion of educational methods and processes is always to be welcomed, for nothing is of more vital interest to every home in the commonwealth than the question of public education.

In the kindergarten is embodied an idealistic philosophy, which has already influenced greatly and beneficently all departments of our schools. But the books are not yet closed, the problems are not all solved, and kindergarten workers everywhere are calling for the co-operation of parents, physicians, and educators in perfecting a scheme of child-culture that is destined to meet a great need. Such faults as are apparent in individual kindergartens are not inherent in the system. The doctrines of Froebel are

fundamentally sound, and the kindergarten as it exists thruout our country today fully justifies the refusal on the part of its patrons to rob Peter in order to finance Paul.

THE KINDERGARTEN OF THE FUTURE

FRANK EDSON PARLIN, SUPERINTENDENT OF SCHOOLS, CAMBRIDGE, MASS.

Some of us, who appreciate the genius of Froebel and heartily approve most of his fundamental principles of education, believe the orthodox kindergarten is neither sacred nor perfect, that the position of the conservative kindergartners is both unwise and untenable, that they emphasize the most defective parts of Froebel's system and forget his most vital and valuable principles. We insist that we are not only true friends of the children but of the kindergarten, but friends who sincerely believe radical changes are desirable and absolutely imperative if the kindergarten is to survive. Kindergartners need to study something besides the writings of Froebel, and to study Froebel anew in the light of modern knowledge of the child. If Froebel were living and familiar with the results of modern research dealing with the growth, development, and education of the child, he would be one of the most severe critics of many of his own methods and much of our practice. To imitate Froebel blindly as tho he were infallible is no more wise than to follow in like manner the teachings of the leading chemists or physicians of the eighteenth century. He was wise for his time but not for all time.

It matters not how old or systematic or æsthetic our theories of the child's education may be, if they are in conflict with the fundamental laws of his growth and development, they are simply wrong and must be abandoned. In the kindergarten, the laws of the child's physical growth and development, especially the growth and development of his nervous system, must determine the time and the method of his training, for the brain is the chief organ not only of the mind but of the body and of life. At birth, the child has as many brain-cells as he will ever have, but they are at very different stages of development and will require widely varying periods and conditions to mature. The brain does not develop symmetrically as a whole but in spots, and there is an invariable sequence in the order of its functioning. Nature's order is always from the lower to the higher forms, the higher being conditioned upon the lower, and she allows no departure from her order and time without exacting severe penalties. If, in our ignorance or impatience, we attempt to force the functioning of centers before their nascent period, nature responds as well as she can and we secure precocious results; but the premature development always falls short of the normal and results in a case of arrested development. Moreover, we interfere with the development of both the centers below and those

above, and so dwarf the possibilities of that brain and actually diminish the sum of human power. At birth, the only organized centers are those controlling the general sensibility, the vital functions and certain reflex movements. After birth, the sensory and motor centers are the first to develop, rap dly at first and then more slowly up to maturity. The lower intellectual organization and language center follow, and the higher intellectual and moral development come much later. At the kindergarten age, the child's brain is very immature and entirely unprepared for most of the intellectual work now required. It is ready for sensory, motor, and language training only. These centers should be freely exercised up to the point of fatigue, but not to exhaustion, for it is only by such exercise that nascent cells can be developed to their maximum capacity. The theory of an all-around symmetrical education for young children is in direct conflict with the laws of their growth. Nature strongly emphasizes one thing at a time, the rest being incidental and supplementary. In our short-sighted anxiety to transform young children into little men and women we do at great labor and cost much needless and even harmful work. It cannot be insisted upon too strongly that the condition of the child must determine the character of the kindergarten.

In the first place, the kindergarten of the future will be true to its name, a garden of children, a place especially adapted to the nurture of children and in charge of those who understand their condition, their needs, and the laws of their growth. If it is to be a garden and not a hothouse, it will generally be out of doors, in the sunlight and open air, among the trees and flowers, associated with the birds and animals, providing healthful conditions for the body, appropriate food for the hungry senses, abundant exercise for the growing muscles, ample scope for the imagination, and unfailing topics for stories and conversation. The health of the child will be the prime consideration, the chief aim being to develop a strong, well-organized body to serve later as the efficient instrument of a well-trained mind. Physical health and strength are of sufficient importance in themselves to receive most careful attention during these early years, but they assume increased importance when it is known that they are essential to the highest and best development of the intellectual and moral powers. Spontaneous activity will largely displace prescribed sedentary occupations, and large lungs, good digestion, a strong heart, and steady nerves will greatly outrank peg-sticking and a meager knowledge of sphere, cylinder, and cube.

The kindergarten of the future will recognize the supreme importance of play in the education of the child and will provide ample time and suitable places for it. Few things seem to disturb the minds of kindergartners so much as the suggestion of free, spontaneous play, and yet nothing is so characteristic of childhood nor so potent in the general development of the child. It is by far the wisest and most efficient teacher he will ever have, because it calls into well-timed and well-measured action both body and

mind without forcing or neglecting either. It trains the senses, exercises the muscles, stimulates the imagination, excites thought, increases knowledge, and promotes normal growth. It involves a concentration of attention, a persistency of effort, an exercise of ingenuity, and an intensity of action never secured in any other way. No school, not even a kindergarten, has yet succeeded in securing such absorbing interest, such harmonious co-operation of mind and body, and such large and lasting results. We wonder that the child does not completely exhaust himself, until we learn that the effect of spontaneous action upon the nerve-cells is very different from the effect of work, or action under the compulsion of the will. Genuine play draws only slightly upon the energy of the brain while imposed duties rapidly exhaust it. A healthy child is fatigued a hundred fold more rapidly by enforced sitting than by active play of his own choosing. Much of the kindergarten play is only make-believe, just playing play, and lacks most of the value of real play. Spontaneity and imagination are largely lacking. I refer to industrial plays representing adult interests and imitating things about which the children know nothing. These bogus plays will certainly give place to the genuine plays of childhood, which are of three kinds: the frolic or aimless capering and laughing due to an overplus of physical energy; the imaginative individual play, in which each child follows his own observation; and the group plays, in which all play together. The frolic is nature's safety valve. It may be somewhat noisy but it reduces the tension, distributes the circulation, and wakes up the whole body. The free imaginative play is more quiet, but, from an educational point of view, most valuable. For it there should be a large collection of all kinds of simple playthings. The ideal place is by the side of a large rock or under a big, low-branching tree. In this kind of play no direction is needed, only unobtrusive oversight with now and then a little sympathetic co-operation by one who will be learner rather than teacher and who will not shatter the child's world of imagination by injecting ideas from the adult world of fact. Here let the child test, plan, construct, tear down, and make himself lord of his little domain. After a while there is need of play which will change the emphasis from mental to physical activity, and the old hide-and-seek, run and catch, circle and singing games are best.

Our kindergarten will surely associate childhood with the myriad forms and voices of Nature. The animals and birds, the trees and flowers, the clouds and winds, speak to the child as they will never speak to him again. The spirit of nature calls to the fresh spirit of the child to know her and to love her. This is his golden period for gathering thru his senses a stock of elementary ideas. The time for classified knowledge and scientific thought comes later. Now is the time for harvesting the materials of thought—sense and motor impressions. The country provides the most natural food for the mind of the child; without it, it is difficult to secure a normal development. "God made the country, but man made the town." One

is the created world, the other the manufactured world. The ideas from one are general and standard, those from the other, individual and special. The sensations from the city differ from those of the country both in kind and in quality. They are man-made, too obtrusive and noisy. They shout to the senses of the child and tend to confuse, overstimulate, and tire him. They come too fast, present too may details, and do not give sufficient time for reaction. Nature presents objects and forces more quietly and harmoniously. She whispers and smiles and keeps still, so that the little investigator can observe and experiment without distractions. She neither gorges nor starves him but gives him each day his daily bread. Her influence seems to develop rather than to ripen him, to implant the germs of wisdom rather than of smartness. To starve the senses in childhood is to dwarf the intellect in manhood and to impoverish life.

Our kindergarten children should also see the works of man and man at his work—locomotives, fire-engines, boats, and beautiful buildings; the carpenter, mason, farmer, and blacksmith; policeman, fireman, bootblack, and newsboy; trench-digging, road-making, street-cleaning, and house-building; in fact, every place and everything within the radius of their safe and possible observation. They should see the materials, the processes, and the results. Therefore, the home of our kindergarten will be near the large parks or in the outskirts of the city, and means of transportation will be provided so the children may have both rural and urban experiences.

The kindergarten of the future will give much attention to oral language training, the children doing most of the talking. After new discoveries and new experiences, they will be encouraged to tell about them as directly and as clearly as they can, being allowed to use gesture freely to aid their thinking and expression. The kindergartner will listen patiently, explain clearly, and answer truly. It is a peculiar fact that the language center of the brain develops in connection with the hand most used in acquiring thought or in expressing it, being located in the left hemisphere of right handed persons and in the right hemisphere of the left-handed. The language training must necessarily be largely individual, each child having frequent opportunities to tell the story of his experiences and to ask his questions. The most profitable language exercise for the acquisition of language power is the one in which the child tries hardest to give adequate oral expression to his own thought.

Of course the kindergartners will continue to tell the children the old favorite stories, which have stood the test of ages, and will teach the choicest selections from children's poetry. In fact, they will not only learn a large number of the very best stories for children, representing all sorts of conditions, appealing to all of the wholesome emotions, and teaching many important lessons; but they will study to tell each story in the most appropriate words, tone and rate of speaking, with just the right emphasis, gesture, and facial expression. They will carefully note the prevailing mental condition, or state of feeling of the class, and, selecting story a to

match it, will, after seeing that every child is in a comfortable and attentive attitude, tell the story in the most vivid, charming, and effective manner. Having completed the story, they will not immediately proceed to something else, but will give the children time to think, to recover somewhat from the spell, to talk it over and ask questions which should always be answered intelligently, in harmony with the spirit of the story, and, as far as possible, in its very words. Whenever a story is retold, it should be in the same words and manner as at first. After the children are familiar with it, some child may tell it instead of the teacher. This will finally lead to the acting or dramatizing of some simple stories.

But what will the kindergarten of the future do on cold and stormy days? When the weather drives the children indoors, they will go to a large, well-lighted and well-ventilated room, fringed with a row of seats and furnished with a piano, pictures and story-books, and all sorts of playthings. The Froebelian gifts, with their formal lessons, their abstract ideas, and their poor mathematics, will be found only as building-blocks. The children will dance, play games, sing songs, and tell stories; they will test, invent, construct, and carry on all the bustling business of a lilliputian world.

The kindergartner of the future will be a most important factor in the community and in the lives of the children. She will have a healthy, well-trained body; a quick, sensible, and versatile mind; and, above all, a great, warm, motherly heart. She will be the friend, companion, and guide of the children. She will really and truly love them and understand them, not only sympathetically but scientifically, the laws of their growth, the order of their development, their instincts and interests, their physical needs and mental requirements. She will know and love Nature, be able to recognize the trees, identify the flowers, call the birds by name, and tell the story of the hills and stones. She will know the best plays and games, the best childhood songs and be able to sing them, the children's favorite stories and be able to tell them charmingly and always in the same way. She will be able to run, throw a ball, roll a hoop, skip a rope, make a whistle, steer a sled, and do all the other things which little folks expect of their grown-up friends.

Finally, the kindergarten of the future will respect the individuality and spontaneity of the child and give ample scope for his imagination and initiative. It will provide an environment rich in its opportunity, inspiring in its suggestion, wholesome in its influence; but will give far less attention to regular programs, formal instruction, and sedentary occupations. It will be more of a nursery and less of a school. It will stand for the rights of the child—the right to healthy normal growth; the right to play in the open air and sunshine; the right to see something of the works of God and the ways of men; the right to be a child, to think as a child, to speak as a child, to understand as a child, in order that, when he becomes a man he may put away childish things and be as much of a man as possible.

DEPARTMENT OF ELEMENTARY EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Miss Adelaide Steele Baylor, Department of Public Instruction. Indianapolis, Ind.
Vice-President—H. B. Wilson, Superintendent of Schools.....Decatur, Ill.
Secretary—Miss Nellie M. O'Keefe, Principal of Jefferson School.....St. Paul, Minn.

FIRST SESSION.—Wednesday Forenoon, July 12, 1911

The meeting of the Department of Elementary Education was called to order in Temple Beth Israel by the president, Miss Adelaide Steele Baylor, Department of Public Instruction, Indianapolis, Ind.

Under the general topic "The Curriculum," Edwin R. Snyder, professor of education, State Normal School, San Jose, Cal., read a paper on "The Need of a New Standard of Measurement for the Various Subjects of the Curriculum." Informal discussion was opened by Mr. Heaton, of San Francisco, who expressed the opinion that the people *have* faith in the public schools, as shown by their willingness to raise money in various ways for their support. Mr. Work believed that the educational forces were strengthening the system by discussion and criticism from within.

The Chair named the following persons as a committee to nominate officers for the ensuing year:

Miss Nellie M. O'Keefe, St. Paul, Minn. Mr. Everett Shepardson, Los Angeles, Cal.
Miss Glascock, San Rafael, Cal.

"Industrial Education in London" was presented by Miss Kate Stevens, principal of North Islington Central Girls' School, Tollington Park, London, England.

A "Report of Committee on Motivation of School Work" was presented by H. B. Wilson, superintendent of schools, Decatur, Ill., chairman. Discussion was led by Everett Shepardson, head of the practice school, State Normal School, Los Angeles, Cal. Mr. Richard D. Faulkner, principal of Horace Mann Grammar School, San Francisco, continued his discussion, stating that he would say "Amen" to much of this paper and that he himself had received inspiration in college from the addresses given daily thru the course. Mr. J. M. Berkey, principal of Liberty Sub-District Schools, Pittsburgh, Pa., strongly approved of the contents of the paper and believed that a child has a right to ask *why*.

Mr. Shepardson made the following motion, which was duly seconded and carried unanimously:

Resolved, That it is the sense of this, the Elementary Education Section, now assembled, that the "Report on the Motivation of the Children's Work" and the accompanying presentation by the chairman of the committee, are so valuable that we respectfully request the Publication Committee of the National Education Association to publish both in full in the forth-coming report of the proceedings for the year.

Mr. Faulkner moved that the committee in charge of the *Proceedings* make reprints of this report and address, to be sold at cost by the Secretary of the National Education Association.

SECOND SESSION.—FRIDAY FORENOON, JULY 14, 1911

The meeting was called to order by Miss Adelaide Steele Baylor, president of the Elementary Section.

Topic: "Health and Sanitation."

Robert J. Aley, president of the University of Maine, Orono, Me., read a paper on "The Health of School Children."

"Playgrounds and Health" was the next paper on this topic, given by L. H. Weir, field secretary of the Playground and Recreation Association of America, Seattle, Wash.

Dr. W. A. Sawyer, director of the State Laboratory, Sacramento, Cal., presented the following paper: "Laboratory Instruction in Hygiene and Public Health." The general discussion was led by Professor Ritchie, of Virginia.

Superintendent Edward Hyatt, state superintendent of public instruction, Sacramento, Cal., extended an invitation to the assembled teachers to partake of the hospitality of the Sacramento valley and receive a basket of fruit to take away.

Miss Nellie M. O'Keefe, chairman of the nominating committee, reported the following names for nomination:

For *President*—H. B. Wilson, superintendent of schools, Decatur, Ill.
For *Vice-President*—Julian C. Bryant, principal, Madison School, St. Paul, Minn.
For *Secretary*—Miss Gertrude Longenecker, University of Chicago, Chicago, Ill.

The nominations were accepted and approved. It was moved and duly seconded that a committee of two be appointed to secure the reprinting of the report and address on "Motivation of School Work."

The president named Miss Nellie M. O'Keefe, of St. Paul, and Mr. T. L. Heaton, of San Francisco.

The meeting then adjourned.

NELLIE M. O'KEEFE, *Secretary*

PAPERS AND DISCUSSIONS

THE NEED OF A NEW STANDARD OF MEASUREMENT FOR THE VARIOUS SUBJECTS OF THE CURRICULUM

EDWIN R. SNYDER, PROFESSOR OF EDUCATION, STATE NORMAL SCHOOL, SAN JOSE, CAL.

When the president of this department invited me to speak at this session, she set as the general topic for discussion "The Curriculum." I was led to select as my special topic the subject just stated because of the fact that there is a widespread and growing feeling or belief current that the education of the day rarely makes for efficiency. This view is not confined to the leaders in education, but is common to the laymen, and prevails to a considerable extent among the teachers themselves.

Men of the business world are constantly pointing out the fact that the colleges and universities rarely fit their students for their life-work. It is also pointed out by these men that the graduate of the secondary school is not only unprepared to enter upon any particular vocation, but that he is deficient in a proper knowledge of the so-called essentials—reading, writing, and arithmetic. On the other hand, the colleges and universities

charge that the product of the secondary school is not only deficient in a knowledge of the three R's, but that it is also deficient in a knowledge of the subjects especially pursued in them.

The situation with the elementary school is similar to that of the others. Here also the public at large has ceased to be satisfied. There is a tendency to lay the blame upon the curricula, and also to criticize adversely the efficiency of the individual product in the various studies, and especially in the formal subjects. The volume of this criticism is increased by the voice of the professional representatives of the higher institutions. In short, the educational institutions of America are at last compelled to face a powerful adverse public criticism, not, as of old, a criticism involving their right of existence or their right to receive public support, but an adverse criticism of their efficiency as measured by their human product.

This adverse criticism has been met frequently in the past by an attempt to shift responsibility. The higher institution has placed the blame upon the secondary school, this institution has attempted in its turn to shift it to the elementary school, and the elementary school has met the adverse public criticism of its product by pointing out the fact that it has been controlled, not by the public direct, but by the higher institutions themselves.

All of these criticisms involve but two phases of the question. The one deals with a need for the addition to the curriculum of a number of more practical subjects. The other deals with results achieved in the subjects already included within the present curriculum. The new subjects demanded by the public are such as will primarily contribute directly to utility. The second demand relates to the subjects which contribute indirectly to utility. I shall confine the remainder of this discussion to the problem as it grows out of the second group of studies; and I shall consider it only in its application to the elementary school.

The failure of the elementary school to satisfy the demands of its critics, whether they be lay or professional, is caused, usually, either by the fallacy of the criticisms themselves—due to the failure of the critics to take into consideration the factors of selection—or by the condition arising out of a lack of time—due to the overcrowded curriculum—in which to secure the standard of efficiency required.

Most of the criticisms directed at the failure of the elementary school to get results cite the weakness of the pupils in the so-called fundamentals—reading, writing (including certain composition), and arithmetic. The critic of results obtained in these fields, an individual of special class, usually compares his own efficiency in one of these fields, either with that of an individual who has no talent, or whose talent lies in another direction, or with that of the average of the mass of children. The fallacy of such comparisons is of course obvious. Not infrequently the arithmetical ability of the average boy of thirteen or fourteen is compared with that of the exceptional sixteen- or eighteen-year-old boy of a past generation.

In all of these arbitrary comparisons we also fail to take into consideration the fact that the child of today is limited in the amount of time that he may spend upon any one of these subjects. Originally the curriculum of the elementary school consisted merely of the so-called fundamentals. Today the number of subjects pursued ranges from twelve to twenty, with the prospect of others to come.

It appears, then, that in so far as there is any validity in the criticisms directed at the product of the elementary schools, it is due either to the fact that we place obsolete standards of measurement upon certain of the subjects included within the present curriculum, or to the further fact that there are certain subjects of a practical nature that should be incorporated within that curriculum.

In our hurry to provide educational opportunities for all American children, we have failed to realize that the demands of life upon these children are as varied as their particular capacities and the occupations they will later be called upon to pursue. Even in the elementary school we have provided for the mass a class education with its class standards of efficiency.

The recurring demand for a more practical education has been met in the past by merely adding to the curriculum more subjects, as these have proven their worth; and regardless of the enlarged content, the varying capacities of children, and future use, both the school and the public have retained for all children the same obsolete standards of measurement of efficiency in all of the older subjects.

We try to get the same results when we divide the time, the effort, and the attention of our children into a dozen or more channels that we did when they pursued but three or four subjects. We retain the same absolute standards of measurement for all regardless of individual ability or of individual need. So closely do we hew to the line, that if a child cannot meet the standard set for a given subject, we refuse to promote him, and thus virtually drive him forth from the school, and forever remove his opportunity for further scholastic preparation for his life-work. We either make all children read, write, or spell with an equal degree of accuracy, or we forever close to them the doors of opportunity.

When a new subject knocks at the scholastic door, its vouchers are always careful to announce that its pursuit will not in the least interfere with the select already occupying positions therein. In fact, they are always charged with subtle arguments to prove that it will react in such a manner as to make for greater efficiency in those subjects already occupying the position of holy of holies. In a degree this is true, or at least it was before so many of the newer subjects secured entrance into the curriculum. It is largely true, however, only in so far as these subjects serve the purpose of a much-needed recreation. In many schools their position is such today that their main function is merely that of a questionable recreation.

In holding on to the absolute standard of measurement for the older subjects, the newer ones have been caused to yield a more or less fruitless harvest. These subjects, such as music, drawing, nature-study, industrial study, manual training, and vocational training, are much more than recreational. They are the real essentials for most of the people, and they will ultimately occupy the select places in that portion of the elementary school which will in the future serve the common people.

Before we can do justice to these subjects, some of the older ones, yea, even the so-called essentials, will have to suffer for most children a much greater curtailment. And why should they not be curtailed? Have we not been proceeding with our education as tho all of our children were destined to scale the same mountain, when we knew full well that most of them were by capacity, disposition, and surroundings limited to the climbing of numberless hills—some even molehills? And finally, has not our procedure in the past resulted in handicapping many individuals in making their particular life-voyages? Does the world demand of the laborer that he should be able to spell as well as the teacher or newspaper writer, or that he should be as efficient in handling figures as the bookkeeper? If the social standard of requirement is not absolute in these matters, why should the scholastic standard be absolute?

We constantly ignore the relative worth of things. When we attack a subject in the school we tend to set as our standard absolute perfection. We pursue this standard so vigorously that we are of necessity compelled to neglect other things of equal or superior value. We fail to consider the fact that the final increment of any subject is frequently secured at an expenditure of energy out of all proportion to the value of the accretion. Further, we fail to consider the fact that the relative volume of this final increment varies for each subject and for each and every individual. Finally, and most important of all, we completely fail to take into consideration the fact that the real value of the acquired final increment varies with the future occupation and surroundings of the individual. We do not realize the fact that with each separate individual a time arrives when it becomes an economic waste to pursue further any given subject, because such pursuit necessarily precludes the possibility of securing a much larger volume of more useful knowledge along other lines.

To be more specific, the school sets a single standard of excellence in the three R's, for the future laborer, carpenter, contractor, or housekeeper, and largely disregards the native capacity, inclination, and opportunity of each, tho these may have already settled the question of his coming occupation and future need. Instead of getting the best possible result in each subject with a reasonable expenditure of energy and time upon the part of the child, the institution holds each to an arbitrary degree of excellence whether there is any chance of his achieving the result or not. All other subjects are usually subordinated to an arbitrary and more or less static standard of excellence

in the so-called essentials, which are really only essential in degree, depending completely upon their application to future need.

It is not improbable that, if our laborer had spent the same amount of time and energy upon some practical subject as he spent in securing that 10 per cent of final increment in the three R's he might have succeeded in placing himself in the class of the artisan. Or, if this were not possible, it is quite certain that the time spent upon such final increment could have been used to much better advantage upon some real content subject. Neither is the carpenter nor the blacksmith primarily measured by his spelling, his penmanship, or his reading; he is solely measured by the results he may achieve in his chosen field, and these results are influenced to a larger degree by the informal content subjects than by a final perfection in the formal fields of knowledge.

The assumption that all must reach approximately the same degree of efficiency in the formal subjects assumes, either that the process of education is serial, and that each subject and each phase of each subject must be approximately exhausted before the individual is prepared to take up any other subject, or that all knowledge is secured thru the use of the so-called essentials. These assumptions are equally false. The process of education is primarily reciprocal, and the direct or sense method precedes or goes hand in hand with the indirect, or intellectual method.

In practice we proceed as tho educational progress in the formal subjects will completely cease with the end of the school term, while in fact real efficiency in these subjects can come only thru the continued practical application of them. If, on the other hand, the individual does not use them they become a useless ornament, soon to be forgotten. It follows, then, that it is of more importance to develop the habit of use in relation to these subjects than to secure a great degree of artificial efficiency in them.

The application of these subjects to real-life situations will also require the incorporation of numerous subjects of a practical nature into the already overcrowded curriculum, and the profitable pursuit of these added subjects will entail new standards of measurement of efficiency in the subjects already composing the curriculum.

It should be clear from the above that the criticisms of the product of the public school, when not rendered fallacious by comparisons that do not take into consideration the factors of selection, are due, first, to obsolete and traditional standards of measurement of excellence which do not take into consideration the need of a modern system of universal education; second, to the inability of the school because of this same false standard to find time properly to take care of the newer subjects of the curriculum, which, being the real source of education, are of the first importance.

Like the traditional standard of measurement which is fitted to those only who are preparing for the professional life, the new standard of measure-

ment will be evolved out of experience thru the process of selection. In this case, however, the experience will be largely experimental, and the selection will be conscious. These new standards of measurement will take into consideration not alone individual capacities and individual inclinations, but also individual needs as they relate to present educational and future occupational and social demands.

The difficulty of applying an individual standard of measurement is of course a problem of administration. Two solutions of the problem suggest themselves. The one is to segregate the pupils into groups and set such pliable standards of measurement as are needful to each group. The other is to lower the standard to a minimum and gradually increase the efficiency in all fields as the pupil advances, differentiating where the need may arise, and carrying the work of the formal subjects well into the secondary period of education.

INDUSTRIAL EDUCATION IN LONDON

KATE STEVENS, PRINCIPAL OF THE NORTH ISLINGTON CENTRAL GIRLS' SCHOOL, TOLLINGTON PARK, LONDON, ENGLAND

There is no grade of education more important than that given in the public elementary schools of a country, for here the majority of its people obtain the only training which they receive as a preparation for their future lives. Here, too, others who pass on to higher forms of education receive the groundwork for that further training.

It is necessary to secure that the education given is efficient and economical, both in making the best use of the short school life of the pupil, and also in securing an adequate return for the outlay of public funds which have been appropriated for that purpose.

It is the duty of the school to discover and foster any special ability or aptitude possessed by a pupil; to encourage initiative, to train the intelligence, to strengthen the will-power and to develop self-reliance.

It must emphasize the right thinking which leads to right action. Habits of observation and accuracy must be inculcated; also the necessity for looking at any subject from other points of view than one's own; the value of tenacity of purpose, and perseverance so necessary for success in any undertaking; the gradual training toward a "suspended judgment," as against hasty generalization; all these must be kept in view, as well as the imparting of information. Especially valuable is the training as to where and how the pupil can obtain information for himself. All this and more will be included in the aims of the best school education. There has gradually come about a change in ideals of education; from being a means of culture and discipline for the leisured few, it has developed a wider and more democratic side, as a means of industrial, civic, and social betterment. This has come about, in a great measure, thru the extended appli-

cation of science to industry; to new commercial activities, and to increased facilities for communication and transport; to the growing use of machinery, and to the decay of the system of apprenticeship.

With increased knowledge, and wider fields of information to be covered, more and more is thrown upon, and expected from, the schools. In order to meet this demand, one of the great achievements of education has been the introduction into the school curriculum of industrial and technical training, with its subsequent, and almost phenomenal, development.

In order to prevent misunderstanding I must premise that the term "industrial school," in its narrower English sense, signifies a school for the industrial training of vagrant or neglected children—a preventive institution where they are usually boarded, clothed, and taught until they reach the age of fourteen or sixteen.

The term, however, gradually widened in meaning, until at the recent important conference held at the Guildhall in London, at which both the Prime Minister and the Leader of the Opposition spoke in favor of its object, the securing of a national system of industrial training, the main resolution read as follows:

> That this conference views with grave concern the large numbers of children leaving school without practical training for definite vocations, and resolves that a national system of industrial, professional, and commercial training should be established, to which the children shall pass, as a matter of course unless the parents are prepared to undertake their future training and without interval, for a definite period, to be thoroly trained for entry to the particular calling for which they are best fitted, such training to be given under fully qualified instructors.

Much enthusiasm was caused by the receipt, during the conference, of the following telegram:

> I am commanded by the King to convey to you the expression of his sympathy with the objects which your conference desires to secure. His Majesty believes that further development of industrial training will be of inestimable benefit to the nation, and he hopes that your conference may have the effect of stimulating and educating public opinion in favor of this branch of education.

A National Industrial Education League, for the above purpose, was formed as the outcome of this conference.

Concerning London, Mr. Blair reports that

> of the total industrial population of England and Wales, employed in factories and workshop, one-seventh are to be found in London. One-fourth of all the clerks of the same area are to be found there. One-fourth of all the men and boys, over fourteen years of age, are engaged in unskilled employments. About two-thirds of all the children leaving the elementary school enter unskilled employments, where there is generally no effort made towards further education, and the effects of the mental and moral training of the elementary schools are soon dissipated. Seventy per cent of the dock laborers employed here have been born in London, the skilled trades are largely recruited by immigrants—newcomers from home and abroad, constituting one-third of the population of London. The system of indentured apprenticeship has largely disappeared, and an exhaustive enquiry in 1906 showed that it would only be a waste of time and money to try to

revive it. Keen competition and extensive subdivision of labor do not afford opportunities for an all-around training; new inventions, or a change of fashion may dislocate industries; initiative and adaptability are needed for success.

"Industrial education" is here used to include, in addition to a general, cultural education:

a) Instruction in the principles, and some practical acquaintance with the methods, which underlie a particular group of allied trades or professions, as training in wood- or metal-work for boys, or in housecraft for girls.

b) Technical or distinctly vocational education, where a large proportion of the time is spent in training for some specific calling, e.g., bookbinding or tailoring for boys, or dressmaking or upholstery for girls.

The London County Council is the local education authority for London. In its elementary primary schools there are 650,000 pupils. These schools consist of: (1) infant schools for those under seven; (2) senior schools for boys and girls, taught either together or separately, between the ages of seven and fifteen. The compulsory school age is from seven to fourteen.

The foundations of manual training are laid, for the younger children, in the kindergarten occupations, which give interest and facility in dealing with concrete substances, foster habits of observation, and give free play to the child's imagination.

Since 1890, when the "Mundella Code" introduced kindergarten training for infants, woodwork for boys, and domestic subjects for girls, manual work has always formed a part of the curriculum of the elementary schools. It has also lately been introduced into state-aided secondary schools as a recognized part of the school work. Its aim is

to train the intelligence thru familiar occupations, to show how scientific methods may be usefully employed in ordinary pursuits, and how much valuable manipulative skill may thus be incidentally acquired.

The problem of how to bridge over the gap which so often occurs between the child leaving the infant school and the age of eleven, when woodwork is taken by boys and domestic subjects are taken by girls in the senior schools, has of late been receiving much attention. Various attempts have been made to this end. Needlework for girls is, happily, continuous thruout. Many persons think that these subjects should be taught by members on the regular staff of the school and not be treated as outside or special subjects.

There are two avenues by which promising pupils may pass from the primary school to a place affording more advanced education: (1) By means of scholarships, accompanied by maintenance grants, where needed, tenable at the fee-paying secondary schools. These are mainly intended for pupils who are likely to remain at school beyond the age of sixteen. The secondary schools contain 30,000 pupils and are required, as a condition of receiving financial aid, to reserve 25 per cent of free places for pupils coming from the elementary schools. (2) By nominations for a central

school where a four years' course of general, and also a more specialized, education is offered to suitable pupils, whose school life must close at about the age of fifteen and one-half. These schools, only recently established in London, have a distinctly commercial or industrial bias. They are planned in order to continue the general education of the pupils, and at the same time to develop their adaptability of hand and mind, so that by the time they are between fifteen and sixteen, they may be in a better position to take up some trade, or industry, or business. With this object all boys are taught some forms of handwork, and in the schools with an industrial bias considerable time is devoted to workshop drawing and the use of wood and metal tools. In schools with a commercial bias, attention is given to the details of office-work, while all girls are trained in practical subjects, such as domestic economy, home dressmaking, and general needlework. No money grants are given to pupils who enter the central schools. No fees are charged, but at the age of fourteen, in the case of pupils whose parents are unable to keep them longer at school without financial assistance, a limited number of exhibitions are offered to promising pupils, to assist in meeting the incidental expenses from their fourteenth birthday until they leave school. Pupils between the ages of fourteen and sixteen in both central and secondary schools may compete for trade scholarships. There are 60 central schools in London containing 20,000 pupils. They are pretty equally divided into boys', girls', and mixed departments.

In the schools having an industrial bias, from ten to twelve hours per week out of a total of twenty-seven and one-half hours must be given to practical work, which for girls must consist of elementary science, domestic economy, drawing, needlework, dressmaking, millinery, or other approved subjects.

TRADE SCHOOLS FOR BOYS

There are 8 trade schools entirely supported by the council, and 3 which are aided or partly supported. They are of two kinds: (1) preparatory schools for allied groups of trades; e.g., wood-working, engineering, building-trade, book production, etc.; (2) those which train for specific trades; e.g., si versmiths, tailors, men-cooks, bakers, etc.

There are also, in London and its suburbs, other trade or technical schools established by private enterprise and philanthropy. One of these, the South Norwood Technical Trade School, founded by the late Mr. W. F. Stanley, will well repay a visit.

TRADE SCHOOLS FOR GIRLS

The first day trade schools for girls were organized by the London council in 1895. There are 4 entirely and 2 partly maintained by them. They all prepare for some particular trade and are intended to be a substitute for apprenticeship. The trades taught are dressmaking, retail and wholesale ladies' tailoring, waistcoat-making, millinery, corset-making,

upholstery, laundry-work, cooking, embroidery, photography, and hairdressing. There are about 700 pupils. The course lasts for two years. The age of admission is fourteen to sixteen. Scholarships are granted to suitable pupils from the council's schools, and any other places may be filled by fee-paying pupils, provided they have reached a certain standard of general education, as shown by their attainments in English, needlework, and drawing. As the work becomes more widely known the competition for entrance becomes keener.

About twenty-two hours a week are given to purely trade teaching, and ten hours to general English subjects, physical exercises, and drawing, including design. The English subjects are carefully co-ordinated with the technical instruction. Special attention is paid to the writing of business letters, to correct spelling, and to composition. The reading of good literature is encouraged.

MANUAL WORK IN THE SPECIAL SCHOOLS

Mrs. Burgwin, the superintendent of the schools for defective children in London, was good enough to furnish me with the following particulars: Leicester was the first English town to establish a class for mentally defective children, in April, 1892, and later in the same year London followed with its "School for Special Instruction." From the first it was recognized that children in these schools must be taught by methods different from those in use in the ordinary elementary schools, and so training by means of handwork was accepted as one of the special features of these schools.

Manual work for boys.—(1) Senior schools (age twelve to sixteen), bootmaking, tailoring, woodwork, metal-work, and drawing. An interesting school of this type is to be found at Romilly Road Center, Finsbury Park, N. (2) Junior mixed schools—here we find drawing and coloring, chair-caning, cane-weaving, raffia-work, etc.

In ordinary special schools a minimum time of six hours per week must, by law, be given to woodwork in the senior schools, both for boys and for girls; about three-fourths of the time is given to the various crafts which are taught. In London, defective children generally remain in the infant schools (where much handwork is taught) until they are seven years of age. They can remain at school only till they are sixteen years of age, and may leave before that age (after reaching fourteen) only by obtaining special exemption in order to go to approved work.

A voluntary care committee deals with the placing of the children on leaving school, and watches over them for the first years after they commence work.

The numbers on May 12, 1911, were as follows:

a) Schools—90, of which 12 are for senior boys and 1 for senior girls.
b) Teachers—329, including 90 head teachers and 41 instructors in special subjects.
c) Pupils—about 8,200.

Besides the above there are in London hundreds of students preparing for higher careers in both industry and commerce. These may be found in:

a) The schools of the University of London.
b) Polytechnic and higher technical institutions.
c) The Imperial College of Science and Technology at South Kensington.

These, as in the case of secondary schools, may be divided into three categories:

a) Those entirely maintained by the council.
b) Those partly maintained.
c) Those which do not receive financial aid from the council.

In 1908 the Board of Education appointed a committee to report on manual education. This report appeared in 1910. The following is a summary of its recommendations:

a) That handwork should be regarded as an essential part of the curriculum of all elementary schools.

b) That the course of handwork should be continuous thruout these schools, from the infants upward, and that it should be regarded as a method rather than a separate subject of instruction.

c) That a knowledge of handwork principles should be an element in the training of all future teachers.

d) That the ideal to be aimed at is that all forms of handwork should be taught in the school by the ordinary teachers.

Our efforts must be directed toward making the instruction in our schools a fitting preparation, not so much for the higher secondary education of the few, as for the practice for the many, in technical pursuits, in which the overwhelming majority of the children will be engaged in after-life.—*Sir Philip Magnus.*

REPORT ON THE MOTIVATION OF THE CHILDREN'S WORK IN THE ELEMENTARY SCHOOLS

H. B. WILSON, SUPERINTENDENT OF SCHOOLS, DECATUR, ILL.

Whatever other merits this report may lack, your committee has sought to make it constructive rather than destructive, positive rather than negative. We consume no space in pointing out weaknesses in school work, except as they may be implied. We devote our attention to stating the basis for improved attacks in school work and to setting forth typical results attained.

The discussion of the motivation of school work a year ago at Boston, by the chairman of this committee, following which the committee now reporting was appointed, may be briefly summarized[1] as follows: The largest problem in the technique of teaching is that of supplying adequate motives for the work of the pupils. The psychological rather than the logical organization and presentation of the school curriculum contributes to the motivation of school work. The pupils' present needs and interests are the natural and safe avenues thru which to lead them into that response to the best social standards and into those abilities which are essential to effective social participation. School work is meaning-

[1] *N.E.A. Proceedings*, 1910. pp. 418–26.

ful and significant to pupils to the extent that it contributes to the satisfaction of needs, immediate or remote, which are real to them; progress in the motivation of school work will result both from efforts to understand pupils' interests and needs and the methods of building upon them, and from such modifications in the course of study as will be suggested to teachers who teach with sympathetic, open minds, looking for suggestions in the response pupils make to their teaching, as to modifications in the interest of motivation. The sources of motivation, together with a few motives which had produced desirable results in drawing, manual training, reading, and language, were briefly indicated by way of illustrating the point of view maintained, and finally the fundamental importance of a united effort to motivate school work and of intelligent co-operation in evaluating our results was urged. The point of view, together with the grounds in support of it, presented before the meeting of this Department one year ago, with slight modifications, is reaffirmed.

This report naturally organizes itself into two divisions: (1) that dealing with those phases of the theory of motivation, not presented a year ago, emphasizing the basis for it in the nature of the developing child and showing its place and function in a hygienic, economic scheme of education; (2) that setting forth some of the results which have been secured in the proper motivation of school work. The second portion of the report is in printed form for distribution.

In the first place, the reports received indicate a need for a more definite understanding of the meaning of motivation and of the approach to, and the means of, securing it. The lack of understanding seems to result in part from confusing certain terms employed in modern educational parlance which express the efforts of the school to render its work and processes more valuable to the children. That the work may be more impelling and also more profitable, the modern school employs incentives, it appeals to children's interests, and it seeks to establish motives in the lives of the children for the work they do. It is a mistake, however, to use the terms incentive, interest, motive, interchangeably.

Let us briefly note the content expressed by each of these terms when used with discrimination. An incentive is characteristically something to be had following a series of efforts, but the thing gained is not produced by or developed thru the effort expended. Rather, the thing gained is external to, or outside of, the immediate result produced by the effort. Incentives range, to be sure, from the most material, mercenary prize to the loftiest social and spiritual gift, or reward, man can confer. The effect of an incentive is to move the mind, stir the passions, and cause action. It is, however, as noted above, external to the direct results produced by the acts it excites. It stimulates one to efforts much as martial music quickens the step and strengthens the courage of the soldier, inspiring him to do his duty even in the face of grave danger.

An interest is what lies between the self and some end which the individual may later attempt to realize, because he believes that end is essential to self-realization. It is characteristically statical, altho action must follow if one's interest in the thing or an end reaches the degree causing him to choose it as a goal for realization. Viewed with reference to its possible outcome, interest is always potentially active, of course. Interest and volition fuse in the act of pursuing an end, but the interest is not the action nor is it ever the goal of one's activity.

A motive is not an external reward conferred at the conclusion of a series of efforts, nor is it what lies between the present self and something which it is believed will promote self-realization; but it is a[1] "gratification contemplated," operating to cause the efforts of the one desiring it. The distinctive mark of a genuine motive is that the contemplated end is produced by, and realized as, the result of a series of efforts. It must also be borne in mind that the "gratification contemplated" is always a complex mental product, composed of intellectual and emotional elements and of motor tendencies. Rowe states it well when he says:[2] "it is any definitely recognized ideational, emotional, or volitional tendency." Our motives then are really a crystallization of all of our tendencies to action into a series of accepted, longed-for goals, varying greatly, of course, in their value and importance in advancing life's problems. Each is a power which possesses and permeates one, reaching the fundamental springs of his inner life.

My experience as a boy on the farm definitely illustrates the operation of a genuine motive. For the work I did in gathering and marketing the butter and eggs, I shared the profits derived from the production and sale of this produce. This profit was the "gratification contemplated"; it was my goal. It caused my effort and this effort produced the contemplated end (the profit) which served to motivate my acts. Whether one's motive be to earn money, write a letter, assist his classmates, or delight his parents, it operates similarly, generating the effort which, if successful, enables him to realize the longed-for end.

From the foregoing brief discussion of incentives, interests, and motives, it is evident, perhaps, that whereas incentives are superficial and external in relation to one's efforts, motives are fundamental and vital in determining effort; one is proposed to or held before the child to stimulate him, while the other arises out of his own efforts in self-expression and self-realization. Any motive operates as an incentive, but no mere incentive constitutes a genuine motive.

It must be clear also that motive goes beyond interest. It is more impelling and irresistible. Rowe says,[3] "While . . . . interests . . . . are like railroad-ticket forms, all printed and ready for the agent to stamp, the motive is like the ticket which has been stamped, that is, validated,

[1] *Century Dictionary.* [2] *Habit Formation,* p. 147. [3] *Ibid.*

and is good until used, unless recalled." Our interests incline us more or less strongly to do many things, but action in the way of realizing them will not occur until we have stamped one or more of them as "being good enough for us." While interest lies between my present self and a possible larger self, holding my attention actively upon the projected larger self, motive renders me active in securing for myself the contemplated end which will enlarge me. While there can be no motive without interest, all interests do not result in motives. While a genuine, absorbing interest holds one in rapt, active attention, a definite motive prompts and excites effort, actually moving one to realize the "gratification contemplated."

We are now prepared to appreciate what motivation consists in, and what its sources are, and to see something of its significance. Motivation is accomplished whenever one's effort is directed toward the securing of some contemplated, longed-for end, be it near or remote. As soon as I decide definitely to accept and pursue an ideal it becomes a motive in my life, which motivates all of the efforts I put forth in seeking to realize it. A pupil's work is motivated, then, whenever it contributes to the satisfaction of some need he has felt, to the provision of some value he wants, to the supplying of some control he wishes, to the securing of some accepted end, or to the attainment of some definite goal. Motivated work is therefore definitely purposive in a child's life; it is meaningful to him as a child, with his childish ideals; it contributes to the realization of his present aims. Of course, in the pursuit of an end requiring extended effort, the motive will hardly be sufficient to keep one at the white heat of enthusiasm thruout. At times one's effort will run so low that it seems in danger of fagging out entirely. The fact that it does not demonstrates strongly the imperious force of a genuine motive.

The sources of motives are many. They are derived from our instincts, emotions, interests, ideas, and ideals. A piece of work may be purposeful and meaningful, that is, definitely motivated, for the pupil, whether the motive originates from his instinctive tendencies to play, to inquire from curiosity, to compete, to repeat for its rhythmic effects, or to acquire and master, or from the coercive influence of social standards and social pressure which cause the pupil to do what his social world approves and to acquire those things essential to efficiency in his present and future social situation. As a rational, social being, struggling to succeed, the pupil develops[1] guiding principles, definite purposes, clear-cut standards, and rules of conduct. Out of this body of organizing principles come motives which are determinative and imperious, leading the pupil as he advances toward maturity to set up remote goals difficult of attainment and requiring long periods of time and strenuous efforts for their realization.

[1] Rowe, *Habit Formation*, p. 148.

In view of the peculiar, personal character of motives and of the wide differences in children, the problem of motivating school work is quite as definitely one of varying our work to fit individual needs as it is of discovering those genuine motives which are stimulating to most normal children at any stage of their development. Some motives, genuine and impelling to most children, will be of little worth to certain types of children. These children must be discovered and work suited to their special needs must be instituted if we are to retain them in school and save them to themselves. The successful school is the one which develops the machinery required to adapt its course of study and its methods of instruction, not only to local needs but to individual capacities and interests. Fortunately, we are coming to see more and more clearly that the purpose of education is specific in every life. Social efficiency, the general end of the school, consists in developing the ability on the part of each child to serve society in a specific, definite way.

The proper limits of this report will permit but a brief consideration of the significance of motivation in school work further than has been implied in the foregoing discussion. In a general way, every teacher knows that the problems of discipline, management, and control disappear if her pupils are engrossed in significant, vital work. Intense, vigorous work occupies the child's attention so fully that no energy or time is left for engaging in things which do not contribute to desirable school work. Then, too, when the pupils are eager for a result, progress is more rapid and the work is easily done with greater accuracy and thoroness.

In a little greater detail, let us note the significance of motivation in relation to the drill work of the school and in promoting those general training results which the school is expected to develop. In the first place, two general types of drill should be recognized: (1) rote drill, the older type of drill, in which individual facts are repeated over and over in the hope of fixing them in memory with the belief that they will be valuable in some future situation; (2) systematic, or scientific, drill in which vital, significant facts and principles recur in new and meaningful situations.

The amount of rote-drill work in the schools is growing gradually less. More vital ways are in use for securing the results we formerly sought thru rote drill. Even spelling, the combinations in addition, the differences in subtraction, and the multiplication table are taught mainly thru systematic drill. The rote drill which is employed is so vitalized thru the use of games and other social situations, as our printed report on motives employed in spelling and especially in arithmetic shows, that it seems quite satisfactorily motivated. No teacher who has employed these motives questions their value in securing quicker and more lasting results than were secured when mere repetition under compulsion was depended upon for the desired end.

Systematic drill is occupying a much larger place under the new educational régime. If the work in which it occurs is motived work, as it should be, the knowledge and habits thus acquired are gained under the most favorable circumstances. They can be thus largely fixed for use in future situations with a minimum of conscious effort on the child's part to acquire them as such. Systematic drill reduces conventional work and methods to the minimum and exalts the vital and significant.

It seems to your committee that the much-discussed, mooted problem of how to secure formal discipline, or general training, thru our teaching is solved, in part, at least, by the proper motivation of school work. All recognize that general training must be had and all concede that somehow it is secured to some extent. It has been accounted for by Thorndike and others from the fact that subject-matter is identical in different subjects (for example, mathematics appears in physics), and that methods are duplicated (laboratory methods in the different sciences are very similar). In his *Educative Process* (p. 216), Bagley proposed tentatively the operation of a third factor in promoting transfer of training, the factor of ideals. Ruediger, in his *Principles of Education* (p. 114), shows experimentally the ground for such a third factor and proposes to denominate this factor, "Identity of Aim," and, in his *Educational Values* (pp. 191–94), Bagley seems to endorse this terminology, altho he gives it a wider significance than Ruediger does. Curiously enough, however, while Bagley urges the value of ideals in promoting general training, he[1] seems to attach little or no value to motivated work (work done under the stimulus of a validated ideal) in facilitating general training.

The theory of motivation rests upon the fundamental value of a controlling, organizing, directing aim or purpose. To determine upon a definite end is to set up a motive for effort, as we have seen. It was further noted that these motives are vital and significant to the individual. Knowledge or a habit acquired under the operation of a genuine motive possesses a significant life-relation; it is already established in a functional way with reference to all of life's relationships. This knowledge or habit was acquired in realizing a vital end. This end is identical in character, altho not in substance, with the succession of ends the individual will be called upon to pursue in his battle for success in life. This is the most fundamental identity of the three proposed in accounting for the transfer of training. Because of its fundamental reach and of the strong emotional coloring a motive always carries, this is much the strongest of the three factors in promoting transfer of training. If we accept the foregoing, it must follow that to the degree in which life motives dominate the pupil in the mastery of knowledge or in the acquisition of habit, will that knowledge or habit be effective as an instrument in the solution of later problems. That is, the possibility of connecting knowledge or habit with the

[1] *School Review*, February, 1911, pp. 80–81.

real problems of later life will be the greater, the more closely the initial mastery of knowledge or habit has been related to similar vital problems. President Emeritus Eliot brought out this principle in a striking way in his address before the National Education Association one year ago when he showed the superior work done by students after they reached the strictly professional courses in their university training. These courses procure the most "active interest and co-operation of the minds and wills subjected to them," said he, hence the results attained are phenomenally great when compared with the progress made by the same students in their general culture courses. Genuinely motived work renders all school work what might be called "professional" in the appeal it makes, for it is related to the student's then vital problems.

Of course, your committee does not wish to minimize the value of facts and habits acquired without particular reference to real life problems. Thru the adaptive instincts of play, curiosity, and repetition, nature has provided for the acquisition of useful information and useful habits at a time when the child has not the slightest conception of their later uses. These results are valuable and serviceable. Indeed, with our present insight into the methods of securing motivation, we shall be compelled to rely largely upon these instincts to give us our results. We see how to motivate economically only a limited portion of the work now taught in the schools. Further, also, we must never forget that the results attained under the operation of genuine motives are secured by reason of the fact that we make the conditions most favorable for the working of our instincts.

The printed portion of our report, in your hands, has been made possible by the fine response of teachers to the efforts of your committee to secure reports of motived work. Some reports were quite extended and showed great care and preparation. This was true of the work sent in from the Horace Mann School, East St. Louis, and especially true of the reports on reading, geography, and arithmetic furnished us by teachers in the Francis W. Parker School, Chicago. The report makes no attempt to estimate the amount of such work in the country; it merely seeks to show that such work is being done. Evidently, we secured very meager reports of what is being done. We had no funds to make an exhaustive inquiry. Our returns also showed that teachers find much difficulty in reporting their work in terms of motives and specific problems. An examination of a large number of representative courses of study showed that they are not written so they lend themselves to execution in the form of specific problems.

Our reports showed that there is much confusion in the use of terms. For example, many reported ways of making the work interesting, but it was not organized into definite problems centering about vital motives. The teacher's aim in presenting the work was confused with the pupil's

motive in doing the work. Mere incentives and devices employed in teaching were reported as motives, and so on.

Inadequate tho it is, if this report affords any help to teachers in enabling them to secure a more effective attack in their work and if it stimulates superintendents to organize their courses of study so as to promote more rational and vital teaching, the work of your committee has not been wholly in vain. We hope it may help to point the way to the sources of problems and to give all an inclination to organize their teaching more largely from the problem-solving standpoint.

In closing, your committee would call your attention briefly to three general considerations growing out of this study: First, while motivation is not the only problem before the teacher, it is the largest one in the technique of teaching. The Great Teacher showed that a man is measured by his motives. Larned accepts this standard in his study of greatness in Napoleon, Cromwell, Washington, and Lincoln. Just as the true measure of any man is determined by his motives, so a school is to be judged by the motives about which the children's work is organized.

Secondly, the problem of motivation is no more one of finding a motive that will impel the children to large results in their work than it is of cultivating in them a feeling for and a disposition to choose worthy, lofty, uplifting motives. This is most effectively done, however, by organizing our work and methods of procedure so that the pupil's energy is always entirely consumed in his effort to realize some worthy end which is significant to him. As he develops, these ends will become more and more worthy under the guidance of teachers, and thus his moral standards will be elevated and desirable progress in his complete socialization will be made.

Finally, the effects which adequate motivation produce in the student's success in his work are quite as significant for his personal welfare as motivation of the school's work is significant in determining the efficiency of the school.

"In the first place, motives for work focus the student's apperceptive capital upon the problems which he desires to solve. They cause his related past experiences to crowd to the front. This is true whether the apperceptive mass most needed in the situation be emotional tone, volitional attitudes, or facts and principles. Adequate motives inhibit the non-productive expenditure of mental energy and center it definitely on the tasks of vital concern to the student.

"Again, adequate motives insure enthusiasm in the student's work. They establish the right emotional atmosphere for work. It is not a superficial enthusiasm resulting from the teacher's charming personality, or from her vivacious manner and skillful methods of presentation, or from an admiration of her great learning, altho all of these are valuable assets, but it is a deep-seated, enduring enthusiasm born of the student's

conviction of the large value for him of the mastery of his work. In such an atmosphere of genuine enthusiasm, difficulties vanish, results are attained, and victories are won. It is in the white heat of an abiding enthusiasm that hard problems are solved, immortal poetry is written, great music is composed, eloquent oratory is developed, and significant conversions in religion or politics occur. Caught up by intense enthusiasm, the student gets a vision of larger things, ideals are born, and relations, otherwise impossible, are established.

"Further, if the student is spurred on by right motives, he manifests more originality, greater initiative, and large independence in attacking his work. In his effort to solve his problems, he will think of more valuable things to do, of more sources of aid, of different plans of attack, and of different methods of approach. He will not depend upon imitating some student brighter than himself, nor solely upon the directions of his teacher. Rather he will become more inventive and aggressive. Instead of sitting, looking, listening, and answering when pumped, as students too generally do, he will be thinking, planning, creating, initiating, and executing.

"Yet further, not only do all of these effects manifest themselves in the student if his work is significant and definitely motivated for him, but the increased and enlarged results which he secures react to motivate further all his efforts. It is the motivation resulting from success. Nothing stimulates to other successes quite so genuinely as a series of successes. Succeeding not only breeds confidence in one's self but it develops an insatiable hunger for additional success. It is under the intoxicating influence of succeeding successes that the student is led into greater and greater tests of his ability, with the result that he taps the deepest fountains of his nature and discovers his own fundamental and abiding interests and yearnings."[1]

Appended hereto is the printed report containing the tabulated returns embodied in the reports from teachers.

Respectfully submitted,

Committee

H. B. Wilson, *Chairman*
Superintendent of Schools, Decatur, Ill.

Gail H. Calmerton,
Primary Supervisor, Fort Wayne, Ind.

Thomas Agnes, Jr.,
Principal, School No. 6, Bayonne, N.J.

In the following tabulation, no attempt has been made to arrange the motives listed in the order of their value or importance nor to classify them as to their merit ethically. Some of them are merely artificial incentives.

The rules governing the length of papers forced the committee to omit all of the vitalizing material contained in the excellent discussions some sent with their reports.

[1] *School and Home Education*, February, 1911, pp. 228–35.

Only the skeletons of these discussions pertaining directly to our problem are reported below.

READING

Motives in reading spring from the social value of the ability to read. It enables one to gain ideas needed in solving problems, to aid or entertain his friends and classmates, and to "express beautifully one's own conception of something that is really capable of arousing individual emotional expression."

Motives reported: (No attempt to distinguish silent and oral reading motives.) (1) to express the picture, music, and emotion the reader is personally enjoying; (2) to entertain an audience with a play, as other grades of school, parents' meeting, general audience; (3) to share information with others needing it, as in working on a phase of history, a problem in civics, the making of a school garden; (4) to show an upper grade the progress made, as when lower grade children read to an upper grade or upper grade children read to a lower grade; (5) to share interesting stories found in out-of-school reading, the new Christmas books, perhaps.

SPELLING

Motives reported: (1) making little dictionaries in second grade in which were put all words children could spell; (2) wishing to write a letter to board of education asking for playground apparatus required quite a campaign in strenuous spelling before the letter could go; (3) preparing to defeat other schools in term spelling contest; (4) wishing to have name on list of pupils perfect in spelling; (5) wishing to spell well enough to be allowed to set type in school printing office.

LANGUAGE

The motive stimulating the child to effort in his language work is the desire to communicate for the purpose of learning, instructing, or entertaining. Reports showed the the following needs for correct and effective language expression served to motivate the language work: (1) to tell supervisory officers, children of another grade, those attending the school assembly, parents, or grandparents a story that was much enjoyed; (2) to thank a citizen for prize money, the board of education for a clock, hedge fence, etc., a higher grade for books loaned and for programs made, the postmaster and city librarian for privilege to see President Taft from their lawns, a mother for making pen wipers for all children in her son's room, a friend for paper napkins supplied for use at school picnic, mothers' club for pictures, books, and play apparatus, the liveryman for a sleigh ride and a hay ride, the park superintendent for use of the park and for making play apparatus for the school grounds, citizens for the loan of flowers to decorate the schoolrooms on a parents' day; (3) to invite pupils of other grades or parents to enjoy a dramatization, a good reading lesson, or a literary program, parents and friends to come and see the regular school work on a visiting day or to attend a school fair or bazaar, a citizen to deliver a lecture on some topic related to work; (4) to answer invitations from other grades or teachers, letters from children in schools in Detroit, Mich., Stratford, Conn., and Manchester, England; (5) to inquire of city clerk, circuit judge, or superintendent of schools for information needed in civics or arithmetic work; (6) to apply to superintendent of park, a factory, a brickyard, a molasses mill for permission wanted and to thank these persons for privileges extended; (7) to succeed in a prize story contest; (8) to write programs, prepare papers, and dramatize a story for an entertainment the grade wishes to plan for the parents, the other grades of the school, or a general audience for mercenary purposes; (9) to write "ads" of school enterprises and to report results of school undertakings to newspapers; (10) to write a booklet giving the history of the flag, making it so interesting people will buy it, thus raising money with which to purchase a flag for the schoolroom; (11) to write a letter to State Superintendent Blair thanking him for a courtesy extended the school, letters for the mothers' club ordering the pictures

they wish to purchase for the school with the funds derived from the school fair, for literature to use in the study of birds, and the planting of a school garden; (12) to prepare items for the school paper which is read once a week in the school assembly; (13) to write to the congressman for seeds to plant the school garden; (14) to write letters of appreciation to Mrs. Kate Douglas Wiggin, telling her what keen pleasure was experienced in reading her *Rebecca of Sunnybrook Farm* and to Mr. Ernest Thompson Seton in reference to the pleasure the reading of his animal stories has afforded (A diary of this correspondence was prepared for binding in manual training class.); (15) to ask superintendent of schools for materials needed, privileges wanted; (16) to write something interesting enough to merit publication in the school paper, as a letter to an absent pupil who is traveling in England, a half-day visit to Ichabod's school, adventures of a pay-as-you-enter car, a speech by the Great Stone Face.

Language work reported by one sixth-grade teacher in which good motives are evident:

(1) Make a book of stories about vacation experiences for second grade to read; (2) letter inviting third grade to play a dramatization of *The Lion and the Mouse* which sixth grade wrote; (3) letter to the superintendent of schools inviting him to see the dramatization and enclosing a copy of the dramatization; (4) letter of thanks and appreciation to third grade after they presented the dramatization; (5) letters to parents inviting them to witness a repetition of the dramatization; (6) letter to the superintendent of schools asking permission to visit a sorghum-mill; (7) letter to the owner of the mill asking his permission to inspect the mill and learn the process of making sorghum, and also one to citizens owning automobiles asking them to take them to the mill; (8) letters of thanks to the superintendent of schools, the owner of the mill, and the owners of the automobiles after the visit; (9) a written account of their experiences at the mill to loan to other grades which did not visit the mill; (10) letters inviting parents to attend the school's Thanksgiving exercises and enclosing program; (11) letter of request and later one of thanks to the principal of another school for the loan of a picture needed in a colonial life scene in the Thanksgiving program; (12) letter of request and later of thanks to the kindergarten teacher for the loan of her small chairs, to a citizen for the loan of his curtain-stretchers, and to the teacher of another grade for the loan of some Indian shields, all for use in giving the Thanksgiving program; (13) letters of thanks to the first grade for the privilege of witnessing their dramatization of parts of Hiawatha; (14) letters at Thanksgiving time such as the early colonists might have written to friends in Europe; (15) invitations to all in the building and to all supervisory officers of the schools to witness their Discovery Day exercises on October 12; (16) making programs for Discovery Day exercises; (17) writing play for Discovery Day program; (18) letter of request and later one of thanks to seventh grade for the loan of costumes needed in presenting Discovery Day program; (19) similar letter to a citizen for the loan of Indian relics; (20) letter of invitation and later one of thanks to the second grade teacher asking her to tell of her travels in connection with certain geography work; (21) letter of request and later one of thanks by girls to a local shoe dealer for shoe boxes in which to keep their sewing; (22) letter of request and later one of thanks to an old citizen for information about early pioneer life in Kentucky, needed in connection with history work; (23) letter of greeting accompanied by flowers to this same citizen on his eighty-seventh birthday; (24) working out story of life of Wagner to enable them to better understand some of his musical productions; (25) letters of reply to children in Stratford, England (Each child gave particular attention to some one thing in or about Decatur or Illinois that no other child was to write about. Gathering the information necessitated visits to factories, post-office, waterworks, public library, Y.M.C.A., Y.W.C.A., depots, coal shaft, etc., also letters of inquiry to newspapers, Chamber of Commerce, factories.); (26) letter of sympathy accompanied by a basket of fruit, to a sick schoolmate; (27) letter of thanks to a citizen who loaned his Victrola

at Christmas time, playing selections appropriate to Christmas season too difficult for pupils to sing; (28) Christmas greetings to teachers and supervisory officers of schools; (29) preparing a February booklet containing papers and programs pertaining to noted men born in February; (30) compiling booklet recording legends of St. Patrick's day; (31) replying to letters from Indian children; (32) letter of sympathy to a classmate at time of his grandfather's death; (33) compiling the history of the school this grade attended, it being the oldest school in the city; (34) compiling booklet of Easter legends; (35) writing essays in competition for a prize offered by a citizen on "The Attraction and Protection of Song Birds"; (36) girls answering an advertisement in local paper for "Girl Wanted"; (37) boys answering an advertisement in local paper for "Boy Wanted"; (38) letter of request and later one of thanks to superintendent of schools in connection with school picnic at close of year.

A careful checking of the technical work in language and grammar, assigned to this grade, showed it had all been covered in the meeting of actual situations requiring written work. Oftentimes it was found necessary to refer to the books or take a series of lessons from the books in order to do successfully what was desired.

GEOGRAPHY

Motives in geography work spring from curiosity, the feeling of need for a larger and better understanding of the great world and its meaning, an appreciation of the economic and social value of geographic information, and from the way in which the facts and materials of geography may be used in games and contests.

Reports show: (1) maps were drawn on floor of schoolroom enabling children to work over them as over country itself, getting directions, contour, size, relative size and position, slopes, drainage, products, industries; (2) sand maps were made bringing out above items and erosion; (3) school gardens were laid out to represent a country and its states and products, etc.; (4) a delta table was used to show erosion, formation of flood plain, wearing of banks, depositing, sifting, sorting, etc.; (5) a device was made to reproduce the formation of Niagara Falls gorge; (6) field trips were taken to clear up ideas of land and water forms and how produced, etc.; (7) games were used involving walking over states and naming them, putting puzzle map together, making product map, industries map, guessing the state or country by an oral or visual representation of it, sailor geography contest; (8) areas and relative sizes, heights and volumes were represented in cardboard and clay or wood blocks; (9) weather maps were made and weather phenomena were dramatized; (10) collections of postal cards, pictures from magazines, railway folders, guidebooks, etc., were made and used; (11) journeys were planned and taken in imagination, involving keeping of careful diaries and writing of letters giving careful reports of trips; (12) illustrated geography booklets were made; (13) real-estate companies were organized to sell land in various localities, requiring a knowledge of climate, water supply, facilities for commerce, products, etc.

ARITHMETIC

Problems requiring solution arising in other work or needs for number ability appearing in efforts to play games result in highly motivated arithmetic exercises and problem material.

Motived work reported grew out of need to solve problems in (1) making calendars, clay pots, handkerchief boxes, glove boxes, jewel boxes, wastebaskets for gifts, dictionaries, wooden boxes divided into smaller compartments by cardboard for holding collections of stones, furniture for doll houses, looms for weaving, penwipers, wigwams, Eskimo houses, crates to pack jellies and preserves made to present to parents at Christmas, bridges and clocks in manual training, sanitary henhouse for hens kept at the school; (2) caring for chickens kept at school, involving purchase of feed, the collection and sale of eggs, and the marketing of the chickens raised; (3) cooking in domestic science,

requiring measuring with scales and dry and liquid measure, purchasing ingredients needed, mixing same in right proportions, and so on; (4) printing which necessitates purchasing paper, ink, oil, cutting paper economically, computing size of cuts and the number of quads and spaces in different lines, estimating the size of type and the spacing of matter for good artistic effects; (5) trying to appreciate the significance of data as to population, taxation, areas, etc., in history and geography; (6) playing games such as Changing Places, Simon Says Thumbs Up, Fireman, Hod Carrier, the Cave Man, the Boy Scouts, Arab Practice, Playing Store, Bean Bag, Ten Pins, Ring Toss, Tumble In, Spin the Top, Going into Business, Banking, involving measuring, counting, writing and reading numbers, adding, subtracting, multiplying, dividing in all phases of arithmetic; constructing various geometric forms, computing perimeters, circumferences, areas; making change, depositing money, balancing accounts, opening and closing accounts, keeping accounts, organizing a company and bank, figuring discounts, profits, losses, and interest, loaning and borrowing, preparing orders and bills, remitting money by draft, check, or postal order; (7) planting a school garden, involving measuring up the plot, dividing it between rooms and then into beds or plots, purchasing seeds, marketing produce and expending income; (8) managing school excursions and picnics, requiring estimating time needed, cost of transportation, food, and so on; (9) conducting school enterprises such as a fair, supper, entertainment, necessitating purchasing, paying expenses, keeping the account, expending the proceeds; (10) determining for the use of the superintendent the cost of books and supplies purchased by the pupils in the school; (11) figuring up the items of the teacher's statistical report for her; (12) keeping account of money given or earned by each pupil and of ways of expending it; (13) entering up data under correct dates in diary; (14) sorting material for first grade boxes so as to get right amount in each box; (15) measuring up school properties as to size, size of rooms, amount of blackboard, etc., for reporting to superintendent.

More remote motives mentioned as operating were: (1) desire to learn early table work accurately so later arithmetic work will be easy; (2) desire to work with speed and accuracy so as to be chosen to a responsible position in the games played; (3) desire to become proficient in mathematics because it is so essential in a business career.

WRITING

Reports showed following needs supplied motives: to write legibly and rapidly in meeting requirements in other work of school, to surpass specimen of preceeding year's work, to produce neat, attractive books for school exhibit at close of year, to write letter to Santa Claus, friends, to make booklet of good writing for present to parents.

HISTORY

Motives reported: writing imaginary diaries of great men, making supposed speeches of statesmen, representing their constituency in the legislature or congress, dramatizing scenes, stories, and epochs, arranging a pageant, preparing to debate some question Congress had to settle, learning structure of a mediæval castle in detail so as to rebuild it in clay, model cave, tools, etc., used by early cave men, working on period of discovery and exploration to acquire knowledge necessary to participate in a conference of the different nations which settled America.

MUSIC

Motives reported: (1) desire to sing at home for parents and guests; (2) to provide music for the school assembly, memorial evening at G.A.R. hall, mothers' club meeting, evening school social; (3) wish to learn a beautiful song they have heard; (4) want to learn to write music expressing own feelings; (5) desire to be able to read music as well as stories; (6) writing melody to fit into that of Thanksgiving program; (7) organizing a school orchestra.

MANUAL TRAINING, DOMESTIC ART, DOMESTIC SCIENCE

Motives reported: (1) making things actually needed for use, as a birdhouse for school and home grounds, a playhouse for first-grade children, furniture for this house such as chairs, tables, couch, rug, doll's dress, doll's hammock, doll for sick child, a dress for poor child, articles needed by a charitable institution, a tea table, costumer, community rug, couch cover, cushion, a bookcase, or a davenport for the school, pencil cases, bags, mats, footrests for small pupils, sand tables, pointers, window boxes, specimen boxes, filing shelves or a glue table for the shop, playthings for school and home use, presents for friends at Christmas or on birthday occasions, articles for sale at school bazaar such as shoe-polisher, cake-beater, pen-and-ink stand, picture frame, tea mat, motto, fancy blotter, writing desks, easels and standards for supporting studies in drawing lessons, binding in book form interesting stories brought for reading; (2) patching, mending, and darning actual garments brought from home; (3) making candy to sell at school fair; (4) serving a luncheon to board of education; (5) making a booklet on sewing containing compositions on thimble, needle, cotton, linen, etc.; (6) making infants' clothes for use of school visiting nurse; (7) allowing students to use shops out of hours, after knowledge of tools is acquired, to make things they want.

DRAWING

The following needs were reported to have appeared and meeting them has called for drawing lessons: (1) to illustrate bird prize compositions; (2) to make posters advertising art exhibits, ball games, entertainments; (3) to paint some pictures suitable for decorating a doll-house, some scenery suitable for use in staging a play written by the class; (4) to design a cover for Miles Standish booklet at Thanksgiving time, booklet on *Early Days in Macon County*, the February compositions, booklets in geography, nature-study, language, the school-garden diary, the flag book; (5) to design a decoration for a picture frame, a pattern for the rug the children wish to weave, for the curtains for the school office or for the office table cover; (6) to win the local paper's prize for the best weather cartoon; (7) to produce the design which will be chosen to decorate the cover for the mothers' club programs, the report of the board of education, or for the school paper; (8) to make a design for the decoration of the schoolroom blackboards; (9) to develop a poster to assist teachers and visiting nurse in their campaign for cleanliness and neatness; (10) to make a motto to decorate schoolroom; (11) to decorate a Christmas tree to send to a sick child; (12) to design covers for stories bound in book form.

GOOD ATTENDANCE

Motives reported: seeking to win the school pennant for the best record in attendance for the week or month, securing favorable mention in the superintendent's bulletin noting the best records of attendance, having name written in list of pupils attending well, wishing to have a record worth pointing to, striving to get on published honor roll by having no grade below E, seeking to make building record better than for previous year, desiring to advance with associates; boys and girls competed in regularity and punctuality of attendance, attending regularly so as to miss nothing of value, win pennant for best attendance.

GOOD CONDUCT

Motives reported: being allowed to go home at first afternoon dismissal, having name placed in honor list, organizing a self-government plan, being trustworthy enough to help check up library and supplementary books and to work in groups without supervision in office, halls, on lawns, to do right for pleasure it affords, allowing pupils who show most care for politeness and courtesy to attend telephone, assist principal, do errands, etc., pleasure of good conscience and feeling of self-respect, pupils organize a self-government system.

WEALTH OF MOTIVATION FROM A GENERAL PROBLEM

A number of reports indicated how almost all phases of the school's work may be motivated by the handling of a large problem or school enterprise.

A May-Day Party—Third Grade

A very interesting lot of work grew out of the decision of one of the third grades to give a May-day party to which their mothers were to be invited. Under the skillful management of the teachers, the children carried the responsibility for the party from its inception to its completion. They wished to earn the money necessary to defray all expenses and to manage the development of the program, the reception of the guests, the presentation of the entertainment, and the serving of the refreshments. While the work was in progress and following it, the teacher based much of her school work upon the problems the children were finding it necessary to solve. Interesting *compositions* were written in which each told how he earned his money and in which the success of the party was reported. Notes were written asking the first grade to make colored paper chains with which to decorate the room, another grade to make programs for distribution to the guests, the other grades for flowers for decoration and for chairs to seat the guests. Finally a formal invitation was written to send to each person invited. After the party was over, all who assisted were thanked in a written note or in a personal message borne by some pupil. A gentleman who contributed some paper napkins received a very courteous and detailed note of thanks. Problems solved during the *manual-training* and *art* lessons grew out of the need for a May basket and a program for each guest. Many problems in *arithmetic* arose in estimating the cost of the party and in figuring up the purchases made. The largest problem was developing the program rendered at the party. This called for singing and added to the interest in the *music* lessons. It also called for a little play and led them to dramatize some of their Greek *history* work.

Operating a School Garden—Third and Fourth Grades

Language work was necessary in keeping garden diary, in writing the Flower Mission for order blanks, in ordering seeds, and in writing letters of request for help in things children could not do and later letters of thanks for help received.

Arithmetic appeared in keeping account of garden's progress by dates, in measuring up garden and figuring up its size, dividing it between rooms, providing paths, determining space to devote to each vegetable, figuring up amount of seed needed and cost of same, marketing produce and expending proceeds.

Much interesting *reading* was done in learning how to make and plant a garden and in understanding the phenomena of plant life which appeared as the garden developed.

The necessity for markers for the beds provided some *manual-training* problems.

A School Bazaar—All Grades

The aim was to raise money to further equip and beautify the playground. The parents' association co-operated actively.

Manual-training work produced for sale 100 salt cups in first and second grades, 1 toothbrush-holder, 2 picture frames, 10 cake paddles, and 27 iron-holders in fifth grade, 1 jardenière stand and 22 dusting caps in sixth grade, 9 button bags, and 15 sewing-bag aprons in seventh grade.

Language work was provided in requests for help and later in thanks for help, requests being for articles for sale on fancy table and in plain-sewing booth, for articles of food needed for supper, for help in kitchen and for waiters in serving supper, for some one (the baker) to roast meat for supper.

Much meaningful *arithmetic* work arose from the need of figuring out the amount of candy needed at candy booth, determining amount of candy to ask each of several persons to furnish, estimating the amount of gingham to purchase to make aprons for

plain-sewing booth, deciding price at which all articles should be sold to make a reasonable profit, deciding amount of popcorn needed and how much to sell for 5 cents, concluding how to apportion money for things wanted.

The School Assembly as a Source of Motives

In the school assembly, all of the children on the floor or in a building meet for a brief series of simple exercises, growing out of their daily school work. It possesses for the entire school many of the values afforded by a general problem for a grade. Some of the features of the program are contributed by the entire school. Each room feels a pride in doing its part well alongside of the other rooms in the school. Usually some room is responsible for the remaining features of the program. It results in supplying motives for good *singing*, improved *compositions*, since only the best are chosen for reading in assembly; better *reading* and *memorizing*, as only the exemplary is presented before the assembly. In the development of dramatization for the assembly, excellent *composition* work is provided. The preparation of programs for the audience calls for neat *writing*, accurate *spelling* and punctuation, and good *drawing*. Reporting the conduct and attendance and other significant facts in the life of the school and awarding a pennant, perhaps, to the most deserving room, in assembly, tends to motivate the formal requirements of the school for the children. No one agency of the school is more effective in reaching the student body and in inspiring it with new and loftier ideals than the school assembly. It possesses all of the advantages arising from the co-operation and competition which numbers render possible and it affords the enthusiasm of "the crowd."

DISCUSSION

Everett Shepardson, supervisor of Training School, State Normal School, Los Angeles, Cal.—Where there is work there must be motive; for there must be an impelling force to stimulate expenditure of necessary energy to reach an ideated end such as is involved in work. Often, however, we need to furnish motives to get children to prosecute work vigorously; we often need, also, to substitute more worthy for less worthy motives, in order to raise the moral tone of the work; the printed report distributed to you is especially suggestive of motives usable in different subjects both by way of introduction and substitution.

Mr. Wilson indicates that much drill work can be eliminated by proper motivation. My limited discussion will be almost wholly restricted to drill work.

Personally, I do not believe that elimination of all drill is desirable. Almost monthly am I grateful for the "Thirty days hath September" jingle. I have had much opportunity both in school and out to learn incidentally the number of days in each month; but this jingle, with attractive rhythm and rhyme, remains my mainstay and I feel fortunate to have had enough drill on it to fix it. But, after all, let me acknowledge, in the spirit of the report, that there are really few things in the *knowledge* phase of the curriculum that are valuable enough to justify much rote drill for their retention.

In evaluating drill, as well as for other purposes, it seems important to get clearly in mind the various outcomes for children in school work. Most pedagogical books and discussions seem to assume that what we want children to acquire is chiefly organized knowledge related to life. There are at least two other resultants that altho not unrelated to knowledge are yet quite distinct from it; namely, æsthetic appreciation and habit formation. The knowledge side of literature, music, and art is of relatively minor importance to the æsthetic; in reading, writing, and arithmetic, knowledge is mainly preliminary to formation of certain habits. For æsthetic appreciation, what is generally understood as drill is especially inappropriate; for knowledge acquisition, drill is usually injudicious; but in the formation of habits, drill, or practice by repetition, is indispensable.

Children can become really proficient readers and spellers, for instance, only by

much drill, or practice for skill, in reading and spelling. So with writing, "figuring," singing, and all *ing* subjects. In many of these, drill may be disguised. The printed report is especially suggestive along this line for reading, spelling, and language. But in writing and in acquisition of number combinations it is difficult to find motives for activities that will give enough drill, or practice, if we limit children's attention to the Now. But why suffer this limitation? Why not recognize and have children recognize in their way that school is not only life but also a definite preparation for life? Co-ordinated control of muscles used in writing that is not obtained before ten is seldom gotten except under great adolescent stress. Number combinations, that are not made practically automatic before the teens, are seldom mastered. Why not have children attack the work in the essentials of such subjects, as things that need to be done because this is *the* time in their development when use of effort will count most for them? In our praiseworthy endeavor to make school life attractive, we should keep in mind the distinction between children's wants and their needs. They often want to stay up at night when they need to sleep. Fortunate the household with parents in whom children confide so that the youngsters are willing, even in opposition to strong desire, to accept judgments of those in authority as to what they need. So in school, we need teachers so fully in the children's confidence that pupils are willing to put forth even great effort to accomplish work outlined. I make no appeal for drudgery, in whose efficacy I have no belief. What I suggest gives opportunity to use extremely valuable motives. Practice drills in penmanship and in number combinations in middle grades are necessary for good handwriting and for effective business life. Are these not legitimate ideals for children? And is not the endeavor to realize such ideals suggested by discriminative leaders worth while? Consciousness of personal power arising from accomplishment of tasks is almost invaluable, its memory acting as a stimulus to put forth even greater effort at a later time. Such tasks may be set at the suggestion, yea, even in response to the order, of a wise director.

After children have acquired a certain degree of facility by drill, or practice in simple form, on the essentials of "habit-formation" subjects, they need much practice in the application of this acquired skill in complex situations. This is really "systematic drill" in "habit formation." For practical suggestions in this field of application, I can do no better than refer you to the extremely valuable list in the printed report in your hands.

THE HEALTH OF SCHOOL CHILDREN

ROBERT J. ALEY, PRESIDENT OF THE UNIVERSITY OF MAINE, ORONO, ME.

What shall it profit a child if he gain the whole world of knowledge and lose his own health?—*G. Stanley Hall.*

Those who have given thought to the matter are agreed that health is a valuable asset. In the hurry and competition incident to the development of this new world of ours, the importance of the care and development of health has been largely overlooked. There has been a very marked tendency to treat the individual as we have treated our material resources. In a general way profit has resulted from the growth and work of men. The immediate economic result has blinded us to the importance of human conservation. The sacrifice of the life and health of many individuals has counted for but little. The supply of brawn seemed unlimited. We have now been working on this plan long enough to realize that the children and grandchildren pay the price of excesses and lack of care of

their fathers and grandfathers. Our experience is bringing us into agreement with the scientific truth long ago expressed by a prophet of Israel: "The fathers have eaten sour grapes and the children's teeth are set on edge."

The tremendous increase in the number of almshouses, homes for defectives, schools for the blind and the deaf, and places of confinement for the vicious, all go to prove the immense loss that has come because the value of health care has not been fully appreciated.

The state has not yet awakened to the real importance of its most valuable asset. No state can be great except as greatness is shown in its men and women. These can be great only if they are strong and vigorous. Every sick and weak individual is a loss to the state. If the loss were individual it would not count so much, but the sick man must be cared for by the well man. The weak man must be provided for by him who is strong. The only sure way to have strong, well men is to give the children a fair chance and a square deal. Strong men do not grow from weak, sick, or neglected children. From the standpoint of state development, as well as from that of economy, no greater question confronts the public today than that relating to the health of school children.

The general subject of health is receiving widespread attention. Health officials are usually intensely interested in the subject and do good work by spreading health knowledge among the people. In some states the secretary of the state board of health has inaugurated a campaign of education by means of special and regular bulletins, by wide use of the newspapers and by public-health meetings. Where this has been done much interest in health problems has been aroused.

Within the last decade much improvement has occurred and many important movements have been started. Quite a number of states have enacted laws regulating the character of school buildings. In these states new buildings must come up to certain prescribed standards. They must be properly ventilated, sufficiently and equally heated, and adequately lighted. In addition to these requirements, the location must be good, and proper sanitary conveniences must be provided. It is rather easy to secure proper new buildings, but it is very difficult to secure the needed changes in old ones. A large majority of the school children of this country are still housed in buildings where the conditions as to light, heat, ventilation, and toilet conveniences are barbarous. Strange as it may seem, it is still possible in many parts of the United States to construct school and other buildings without any adequate provisions being made for the simplest sort of sanitary conditions.

For a number of years there has been a more or less insistent demand for the medical inspection of school children. Quite a number of states have enacted laws authorizing such inspection. Where medical inspection has been enforced, most excellent results have been noted. One of the

most striking results of medical inspection is the proof that it was needed. The very large number of school children found to be suffering from some preventable or curable ill indicates that we have been entirely too slow in providing inspection. The time ought to come, and that speedily, when every school child in America will be thoroly, carefully, and regularly examined by a competent and well-trained physician. Every child has the divine right to be what nature intended he should be—a strong, physical animal. He cannot be this until society sees to it that he has a fair chance. A fair chance simply means that the handicaps of preventable and curable diseases shall be removed. Medical inspection, when properly inaugurated and impartially administered, will bring health and happiness to many who, without it, would be doomed to disease and sadness.

It is admitted by all that medical inspection will not have the desired permanent effect unless school children are trained in the ordinary matters of hygiene. Indeed, in most states hygienic teaching has been required in the schools for many years. It has failed to do the good that was expected, largely because it has been given almost entirely from an impersonal standpoint. Too often the children have studied about hygiene. Where hygiene teaching has been personal and direct, it has usually resulted in great good. In many cases the beginning of the study of hygiene has been deferred to one of the later grammar-school grades. Many children leave school before reaching the grade in which hygiene is taught. The children who do this generally come from poor homes and bad environment. They need the principles and practice of scientific hygiene more than their fortunate fellows who remain in school. Simple elementary health laws should be taught by precept and example in the lowest grades. The teaching should begin with the entrance to school and should continue thruout the entire school life. When this is done, every child will have some knowledge of this important subject.

There are many difficulties in the way of the proper care of the health of school children. The conservatism of the public that expresses itself in the conviction that "what was good enough for me is good enough for my children," is, perhaps, one of the biggest barriers in the way of health progress. Men and women who, as children, attended school where no attention was given to hygiene, and who all their lives have attended public meetings in halls that were improperly heated, lighted, and ventilated, are slow to believe that proper attention to these matters is important. They have survived; others may.

We are slow to give assent to the conclusions of science. We lack faith in the work of men who know. The conclusions arrived at by men of science in matters relating to public health make but little impression upon us. The importance of the early removal of the causes of disease is not seriously considered. We rest rather secure in the conviction that children will finally outgrow their physical shortcomings.

Disease and weakness have become so common that many are disposed to believe them to be the necessary accompaniments of civilization. It is not uncommon to find the gifted amateur who proclaims in loud tones his disapproval of all scientific methods and treatments. By his own intuitions he professes to know more than those who have paid the price by long study at the shrine of knowledge. Unfortunately, men of this type are often followed in preference to the men who really know. The public apparently concludes that there will be about so much sickness, so many weak, deformed, and helpless ones, and that it is no use to enter into a campaign against such odds. The leaders and workers in the cause of better health are not encouraged by the applause of their fellows as are the leaders and workers in other fields where results are more spectacular. The campaign for health is a long one. It must be persisted in for years before large results will appear. It is this very slowness of results that makes the problem difficult.

However, it is because the problem is difficult that it challenges us. Since the teacher lives on forever, he may well undertake the solution of a problem requiring much time. There will be many factors in the solution of the problem besides the teacher, but it is certain that the teacher will always be the largest one. Unless the teacher performs his part well, the correct answer to the problem will not appear.

We teachers have not yet made ourselves felt in public affairs as we should. When we are in attendance at a meeting of the National Education Association we believe, and rightly, that we are representatives of a great national power. Theodore Roosevelt, however, was in office for seven years as president of the United States without discovering the United States Bureau of Education. President Taft wrote a message of twenty-two thousand words and made no mention of the United States Bureau of Education. The Bureau of Education has failed to receive proper treatment from the Congress of the United States in the way of appropriations that would enable it to make scientific investigations concerning the health of school children upon which proper practice might be based. It is certainly possible for the great body of school teachers of America to unite and present the case in such a manner that presidents and legislators must respect the demand.

The school and the teacher should form a closer alliance with health officials. There should be perfect co-operation and complete understanding. There is great need for health officials and medical inspectors who know enough child psychology and pedagogy to appreciate the child's point of view.

The proper care of the health of school children will not come until the public has a more adequate understanding of actual conditions and feels the importance of change. It was formerly supposed that the school was a semi-private institution and that it was most successful when it

kept itself out of the public gaze. That notion is already changing. It needs to change completely. The public must be taken into our confidence. The public must be advised of the actual conditions surrounding children, of the actual troubles which they have, and of the results that come when these troubles are properly treated. The public should know the improvement that occurs in the progress and behavior of the child who is fitted with glasses, of another child whose suffering has been relieved by the removal of adenoids, of still another whose defective hearing has been improved. A school that meets in a hygienic building and all of whose pupils are properly and regularly inspected is a source of health. When such a school opens in the fall, instead of an epidemic of diseases there is an improvement in the health of the children in attendance. When the public realizes this, it will conclude that the care of health pays. Every school that meets these ideal conditions should see that the results are given wide publicity.

There is certainly great need for a larger amount of direct hygiene teaching. How to care for the teeth, the nails, the eyes, the skin, and the digestion, should be taught so carefully that every child will give the correct answer in his habits. The schoolhouse should be made a complete object-lesson in its hygienic equipment. Its air should be so pure at all hours of the day that no child can grow listless, or sleepy, or suffer from headache because he is forced to breathe impurities. Its lighting should be so perfect that no child can suffer from cross-lights or eye-strain. Its heating should be so uniform that every child in the room will have just the proper temperature. It should be provided with the most modern sanitary toilet conveniences in order that every child may learn practically to apply the teachings on cleanliness. Many children will come from homes where proper care of the body is impossible. The school should be equipped to give the care needed. This means that every school ought to be equipped with a first-class bathroom. In every respect the school should be a hygienic model, for it must be remembered that the school is not only caring for boys and girls of the present, but it is reducing the task of the future. If boys and girls of the present have impressed upon them the importance of proper hygienic habits, they will transfer these things to their own offspring, and the teachers of the next generation will have an easier problem than those of the present.

How far the school should go in the matter of personal and sex hygiene is a question not yet well decided. When one reads the statistics showing the awful havoc resulting from sexual sins, he is convinced that at the present there is entirely too much ignorance upon the subject. It would seem that the school could do no better service to the boys and girls during the period of adolescence than to acquaint them with the hygiene of the most important functions of their bodies. At no time in the lives of these people can lessons be more deeply impressed upon them than during this

impressionable period. Perhaps at present the form and the matter of such teaching has not been worked out fully enough to be generally used. It is to be hoped that from the great number of interested students in this field of most practical hygiene, there may come to us a body of truths and a form of presentation that will make it possible for the teachers of the boys and girls from twelve to sixteen to give to them the teaching that will save them from future suffering and make them the ancestors of a strong race.

PLAYGROUNDS AND HEALTH

L. H. WEIR, FIELD SECRETARY OF THE PLAYGROUND AND RECREATION ASSOCIATION OF AMERICA, MADISON AVENUE, NEW YORK CITY

Good health, physically speaking, is that condition of the human organism in which all organs of the body perform their proper functions with natural vigor and efficiency.

The fundamental conditions necessary for natural vigor and efficiency are good food, pure water, air, and sunshine, and exercise therein. It is of the last three that we shall speak especially in the discussion of this topic. First we shall consider some of the conditions in our modern life that seriously interfere with a proper amount of air, sunshine, and exercise, especially as they relate to the development and health of the children; then the result of these conditions; and finally, suggestions as to remedy.

The most fundamental material fact in social, educational, and civic problems of the day is our wonderful industrial expansion. This has brought profound and far-reaching changes in our social and governmental organization, but we shall consider only one of those changes here, viz., the urbanization of the people. One hundred and twenty years ago there were no cities in the United States with a population of 45,000. Today there are over fifty cities with more than a hundred thousand population, eight cities with a population of considerably over 500,000 and three of these cities have an aggregate population of nearly 9,000,000. Of the entire population of the state of New York, 78 per cent live in its towns and cities, over 55 per cent of the population of Ohio are town and city dwellers, while Iowa, a strictly agricultural state, lost 8,000 of its population within the last decade. It is reported that even in California about 60 per cent of the population live in towns and cities. Thus in but little over a century we have passed from an agricultural country, or rather from a country-dwelling people, to a city-dwelling people, and in many cases to cliff-dwelling people in the modern sense of tenement and apartment houses. There is no quarrel with this development. It is natural for people to dwell together and economically necessary for them to desire to do so, and the highest expression of the life of the people not only in this time but in the past and no doubt in the future is, was, and will be

found in such communities as cities. The trouble, therefore, is not with cities *per se* but with the haste and the greed we have shown in the building of them, neglecting to provide ways and means for the maintenance and perpetuation of that physical strength and vigor that marked the people during the time of their existence in the open country. The crowding of the people toward and into the centers of population of course caused congestion. Population increased faster than the means of caring for the waste and offal and faster than human organisms change, bringing disease and death. The number of infantile deaths in the cities yearly is appalling. It is estimated that 1,000,000 school children in this country today will die of tuberculosis before they are of age and that we are educating children at a cost of the neat sum of $7,500,000, who will not live beyond their eighteenth year. It is true perhaps that the years during which the school has the children there is the least loss of life, but even here we find more attention being paid to physical well-being thru medical examinations, operations for nose and throat troubles, clinics for eyes and teeth, visiting nurses, special classes, and schools for backward, defective, and delinquent children—pointing to the fact that the condition has become serious enough to be made a special problem of the educational systems of our cities. The truth seems to be that a vast number of children are finding it pretty hard to survive our modern city civilization and they are finding it hard because crowded living-quarters, shutting out light and air, the gradual deprivation of play spaces, their lack of a normal home life, the low economic condition of many of their parents, and, strange to say, the ignorance of many parents also (in spite of our admirable school system), and I must add, a system of education that begins with the top of the child instead of his feet, all have produced an environment diametrically opposed to the needs of his nature. Some of these conditions and others that might be mentioned are affecting nearly every city and town child. Under such conditions it is inevitable that we should find a gradual physical deterioration of the children and of the people in general. There are two methods of approach from which to attack this problem, viz., the cure method (cure of the individual case), and the prevention method. The scientific world has been busying itself most largely in the past and present years with the cure method—establishment of hospitals, clinics, institutions of various kinds for the treatment of individual cases, etc. The social world, while sending entirely too much of its energies into the same channels in times past, is more and more turning its attention to the prevention of disease and death. Both under present conditions are necessary. It is the duty of society to care for the products of its neglect; but it is a far greater duty to remove the causes of that product and there is a gradual drawing together of all forces in society, scientific, social, educational, religious, and civic, to this end. Out of the social world the playground idea has evolved (strange that it did not come from the educa-

tional world!), as best designed to make modern towns and cities habitable for the children. It strikes a knock-out blow to disease because it brings in the free air, the sunshine in which no germ can live, and full, free exercise in plays and games, and best of all it brings a great, full happiness—the real antitoxin for all ills.

The International Congress upon Tuberculosis declared:

> Playgrounds constitute one of the most effective methods for the prevention of tuberculosis and that playgrounds should be put to the fore in the world-wide propaganda for the diminution of its unnecessary destruction of human life.

The tubercular patient costs the state about $10.00 per week to maintain. The economic loss to the state is at least $15.00 per week. In Baltimore it was found that $1.00 pays for one child on a public playground for six weeks. In Holyoke, Mass., the examining physician of the public schools found that in those districts provided with playgrounds and swimming- and wading-pools there was a remarkable decrease of skin and eye diseases as a result of the summer's outdoor exercises in plays and games. A similar result was noted in Philadelphia. The loss of life from accidental drowning in Rochester, N.Y., in 1907, the year of the opening of playgrounds with wading- and swimming-pools, was 3. There had been in the years immediately previous from 15 to 20 annually. Playgrounds lessen the dangers of injury in the streets from street cars, automobiles, and vehicles of various kinds. In the city of New York last year 76 children of school age lost their lives in the streets and 256 were badly injured. Physical directors and school physicians are more and more beginning to prescribe the playground as the best possible medicine for the correction of physical defects of various kinds in children, and the therapeutic value of play in the treatment of children in institutions for the feeble-minded, epileptic, insane, defective, and delinquent is now more generally recognized both in theory and practice. The superintendent of the Indian Village for Epileptics, New Castle, Ind., writes: "It is hard to overestimate the value of play as a therapeutic agent." It is carried on in this institution both indoors and out of doors. The recognition of the importance of play by the officials of these institutions is in line with the most advanced thought of modern medicine and surgery, which consists largely in giving nature the opportunity to exercise its marvelous renovating and healing agencies. Those educators who have made large use of the playground in their schools are a unit in stating that supervised play makes for bodily vigor, mental acuteness, and improves the discipline of the school. The playground movement comes as a great ally to strengthen one of the very greatest weaknesses of our public-school system, viz., the lack of proper physical training—physical training in the broader sense of calisthenics, gymnastics, athletics, and especially of organized plays and games. The fact that the proper development of the child is largely a question of motor activity, and that play is the natural

and normal means of the expression of this law of his development, should have called our attention to the value of play as a medicine as well as a proper educational force for us to utilize long before this. The unfortunate fact is that school boards and even educators in many cases still fail to recognize that the system of curricula studies, if adhered to alone, is wrong in principle and faulty in results, because it gives the child little that will strengthen him against disease and ofttimes makes him an easy victim to the omnipresent germ. A definition of the characteristics of play at its best will make plain the value of playgrounds in relation to health: In the first place, the best form of play promotes vigorous health because it is out of doors; it is vigorous, natural, spontaneous in spirit, and makes use of the fundamental muscles more largely than the accessory. Secondly, it promotes nervous stability because in the open; because it develops and strengthens the vital organs and fundamental muscles; it rests the higher and more delicate nervous co-ordinations, as of the hands and fingers, by using the older and simpler ones of the trunk and legs; it rests visual areas by allowing the eye axes to become parallel, rests the auditory areas by being reasonably quiet (this applies especially to delicate children); throws off the worry and strain of too much mental effort in the classroom; it relieves the higher centers by action that is mostly instinctive and attention that is involuntary; it tones up the whole system by a pervading sense of the joy of living. Thirdly, the activities of the playground develop physical strength. They have the advantage, as a method of physical training, of using old co-ordinations and fundamental muscles; tend to develop the muscles in much the same sequence as they developed in racial history. But to be effective it must be reasonably frequent and vigorous, using a variety of games making use of different muscles. Fourthly, the games and plays of the playground develop vital and functional strength, because nearly all play involving the fundamental muscles of the trunk and legs causes a quickening of respiration, of the action of the heart, of perspiration, and the strengthening of the stomach. This function of play is far more important than the giving of mere physical strength.

Therefore, among the varied movements for child conservation and child welfare which the wants and necessities of modern city and town life have brought into being within recent years, it seems that the playground is one most fundamental, most necessary, supplying as it does unlimited air and sunshine, and free, wholesome, spontaneous, vigorous exercise therein.

SUGGESTIONS FOR STRENGTHENING PHYSICAL-TRAINING WORK IN PUBLIC SCHOOLS

1. There should be a minimum standard of square feet of play space for every school building. The maximum should be without limit. The minimum perhaps should not be less than 30 square feet for each child,

altho in one state, Washington, this minimum was sought to be set at one hundred square feet.

2. The scope of physical training in public schools should be enlarged so as to include not only calisthenics and gymnastics, but plays and games in the open, and these should be the major part of the system, since it is quite conclusively proven that most of the evils of the system of classroom work are to be found in a system of calisthenics and gymnastics as conducted in a majority of the schools today.

3. The time devoted to physical training should be extended. The ten or fifteen minutes per day devoted to this phase of the training and the development of the children is a farce so far as its adequacy is concerned and when its importance is considered. The recess periods could well be lengthened and given over to supervised play and games, or to farm gardens. In certain circumstances in large cities it would be very profitable to the community and make for the well-being of the children to lengthen the time of the school day and employ the extra hours on the playgrounds, in the farm gardens, or some other form of outdoor physical exercise.

4. Every grade building as well as every high-school building should be equipped with shower baths and swimming-pools, especially in the larger cities and towns. We ought to be past the time when we should expect a single Y.M.C.A. or Y.W.C.A. to meet this need.

5. Inasmuch as a great part of the actual supervision of the children upon the playground will fall upon the teachers themselves, preparation for this leadership should be made a part of the qualification of a teacher. Among the many reasons for this the good it will do the teacher herself is not the least.

6. A primary course of book and practical instruction in sanitation and hygiene should, I believe, be introduced into the upper grades of the common schools at least (perhaps even before), and continued in the high school.

7. Get absolutely rid of that system of athletics which has to do with developing specialists or a winning team. A system of physical training that does not include every child and which does not give special attention to those who need it most, even under a certain degree of compulsion, is not worth the time and energy and money expended upon it.

8. A thoro system of medical inspection is essential to the organization of an efficient physical-training department.

9. The homes cannot be neglected. The co-operation of parents is essential; therefore some plan of parents' meetings, home visitation, and instruction of parents thru visiting nurses or by the teachers themselves would aid greatly. In some cases resort to compulsion is necessary with parents, hence co-operation with the juvenile court or other legal agency is necessary.

There are several other ways in which the schools can aid in the proper physical development and training of the children, such as feeding them under certain circumstances; permitting them to get their lessons in the classroom in the evening, as is done in some parts of New York City and other places; constructing buildings in such a manner that proper light, proper ventilation, proper seating, and proper heating be provided, with absolute cleanliness of rooms and halls and lavatories; open-air schools; sanitary drinking fountains; disinfecting of textbooks, and so forth. Fundamentally, however, the things that are needed most are air and sunshine and a great amount of physical exercise in the open, and this can best be provided thru ample playgrounds, athletic fields, and farm gardens. All these activities of the schools, coupled with the wide social movements for better housing conditions, with pure-milk campaigns, better sewerage-disposal plants, better water systems, continuous warfare against tuberculosis and other special diseases, better sanitary conditions in factories and stores, food inspections, and the movement for better city governments ought in the course of future decades to make for a stronger, more vigorous, more intelligent, and happier people.

DEPARTMENT OF SECONDARY EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—H. M. Barrett, principal of high school.....Pueblo, Colo.
Vice-President—Walter F. Lewis, superintendent of schools.....Port Huron, Mich.
Secretary—Thomas J. McCormack, principal of Township High School.....La Salle, Ill.

FIRST SESSION—Tuesday Forenoon, July 11, 1911

The meeting was called to order in Golden Gate Banquet Hall, San Francisco, by President H. M. Barrett. In the absence of the secretary, O. L. Elliott, registrar of Leland Stanford Junior University, was elected secretary *pro tempore.*

"The Report of the Committee of Nine on the Articulation of the High School and College" was first presented by the chairman, Clarence D. Kingsley, of the Manual Training High School, Brooklyn, N.Y.

"The New Harvard Plan for College Admission" was then given by Harvey N. Davis, assistant professor of physics, Harvard University, Cambridge, Mass., and "The New University of Chicago Plan for College Admission," by Otis W. Caldwell, associate professor of botany, University of Chicago, Chicago, Ill.

The president appointed the following Committee on Nominations:

J. Stanley Brown, principal of Township High School, Joliet, Ill.
Lewis B. Avery, principal of high school, San José, Cal.
Abram Gideon, State Teachers College, Greeley, Colo.

It was then voted to indorse the entire report, including the supplementary report, of the Committee of Nine on the Articulation of High School and College. The vote was nearly unanimous, only two members voting against the motion. At the request of Mr. Kingsley, the committee was given power to amend the report, Section 3 under Division B, making it read as follows:

Every high-school course should include the completion of two majors of three units each, and one minor of two units, and one of these majors should be English.

The meeting then adjourned.

O. L. Elliott, *Secretary pro tempore*

SECOND SESSION—Wednesday Afternoon, July 12, 1911

The members of the department met in round-table conferences at 2:30 P.M. as follows:

A. English—Chairman, James Fleming Hosic, head of the Department of English, Chicago Normal School, Chicago, Ill., in Golden Gate Hall.

The discussion was opened by a statement of the report of the committee appointed to present the views of high-school teachers of English to the College-Entrance Examination Board. Following his statement a general discussion was participated in by the following: Henry B. Dewey, state superintendent of public instruction, Olympia,

Wash.; Mrs. Henry Hulst, head of the Department of English, Grand Rapids High School, Grand Rapids, Mich.; Miss Emma Breck, teacher of English in the Oakland High School, Oakland, Cal.; Lewis B. Avery, principal of the San José High School, San José, Cal.; Samuel S. Seward, Jr., assistant professor of English, Leland Stanford Junior University, Stanford University, Cal.

It was moved and carried that the Round Table of English request the new president of the Secondary Department to continue this committee on college-entrance requirements and instruct them to complete their report and to organize a national council of teachers of English to report to the Round Table.

A motion was made and carried that the name be changed from the English Round Table to that of English Section of the Department of Secondary Education.

The following resolution was unanimously adopted:

Resolved, That it is the sense of the English Round Table of the Department of Secondary Education that a certificate to teach English in the high schools should be granted only to those who have had at least two years of college work in English, including oral expression, and who have had professional training, including the study of principles of secondary education and practice in teaching.

The meeting then adjourned.

W. J. Hunting, *Secretary*

B. Mathematics—Chairman, Mellen W. Haskell, professor of mathematics, University of California, Berkeley, Cal.

"Report of the Committee of Fifteen on a Syllabus of Geometry," H. E. Slaught, professor of mathematics, University of Chicago, Chicago, Ill., Chairman; William Betz, East High School, Rochester, N.Y.; Edward L. Brown, North High School, Denver, Colo.; William Fuller, Mechanic Arts High School, Boston, Mass.; Walter W. Hart, University of Wisconsin, Madison, Wis.; Frederick E. Newton, Andover Academy, Andover, Mass.; Eugene R. Smith, Polytechnic Preparatory School, Brooklyn, N.Y.; Robert L. Short, Technical High School, Cleveland, Ohio; Mabel Sykes, Bowen High School, Chicago, Ill.; Charles L. Bouton, Harvard University, Cambridge, Mass.; Florian Cajori, Colorado College, Colorado Springs, Colo.; Herbert E. Hawkes, Columbia University, New York City; Earle R. Hedrick, University of Missouri, Columbia, Mo.; Henry L. Rietz, University of Illinois, Urbana, Ill.; David Eugene Smith, Teachers College, Columbia University, New York City.

Discussion: Walter N. Bush, principal, Polytechnic High School, San Francisco, Cal.; George I. Gavett, assistant professor of mathematics, University of Washington, Seattle, Wash.

A resolution was passed heartily indorsing the work of the committee, and asking them to make such further modifications as seem desirable in view of the suggestions which they may receive, and to prepare the report for distribution as soon as it is put into final form. It was proposed that the final report of the committee be presented at the next meeting of the Association.

A resolution was also passed asking the Secondary Department to change the name of the Mathematics Round Table to the Mathematics Section.

C. Classical—Chairman, Herbert O. Williams, principal high school, Sacramento, Cal.

The Classical Round Table Conference was called to order in Corinthian Hall by Herbert O. Williams, principal of High School, Sacramento, Cal. W. F. Ellis, Jr., of Stockton, Cal., was appointed secretary of the meeting.

It was moved and carried that the Round Table Conference be organized as the Classical Section of the Department of Secondary Education of the National Education Association.

The regular program was then taken up, as follows:

"The Revival of Greek" was presented by James T. Allen, of the University of California, Berkeley, Cal.

"The Value of Latin Prose Composition in the High School" was presented by W. Scott Thomas, professor of education, University of California, Berkeley, Cal., and discussed by Charles B. Gleason, San José High School, San José, Cal.; J. P. Nourse, Lowell High School, San Francisco, Cal.; Walter H. Graves, Oakland High School, Oakland, Cal.; F. C. Taylor, Pacific University, Forest Grove, Ore.

H. C. Nutting, of the University of California, Berkeley, Cal., spoke on "Latin in the Lower Grades (Below the High School)."

The meeting then adjourned.

W. F. Ellis, Jr., *Secretary*

D. Modern Foreign Languages—Chairman, Abram Gideon, Colorado Teachers College, Greeley, Colo.

The meeting of the Conference in Modern Foreign Languages was called to order at 2:30 P.M. by the chairman.

It was moved, seconded, and carried that the name of the conference be changed from Modern Language Round Table to Modern Language Section of the Department of Secondary Education.

The first paper was "The Final Aim of Modern Foreign Language Study in Secondary Education" by J. Henry Senger, University of California, Berkeley, Cal.

This was followed by a paper on "Literary Appreciation in the Study of Foreign Languages," by Albert L. Guérard, assistant professor of French, Leland Stanford Junior University, Stanford University, Cal.

After a short introduction, the chairman, Abram Gideon, of the Colorado Teachers College, Greeley, Colo., read a paper on "Simplified Spelling from the Scholarly Standpoint and with Reference to the Masses," which was followed by a second paper on the same topic by Homer H. Seerley, president, Iowa State Teachers College, Cedar Falls, Iowa. The meeting was then opened for a general discussion of the subject, in which the following took part: William T. Foster, president, Reed College, Portland, Ore.; J. Henry Senger, University of California, Berkeley, Cal.; H. C. Hall, principal, Irving M. Scott Evening School, San Francisco, Cal.; William J. Drew, Polytechnic High School, San Francisco, Cal.; George R. Noyes, University of California, Berkeley, Cal.; Grace Davis, Oregon State Normal School, Monmouth, Ore.; Dr. R. W. Corwin, chief surgeon of the Colorado Fuel & Iron Co., Pueblo, Colo.; M. R. Kerr, principal, Union High School, Inglewood, Cal., and David Felmley, president, Illinois State Normal University, Normal, Ill.

A committee was then appointed, consisting of Abram Gideon, head of Department of Modern Foreign Languages, Colorado Teachers College, Greeley, Colo., chairman; J. Henry Senger, associate professor of German, University of California, Berkeley, Cal.; and Chairles H. Greenleaf, professor of French and Spanish, Oakland High School, Oakland, Cal., to draw up a resolution expressing the indorsement by the conference of the simplified-spelling movement. This committee subsequently met and agreed to the following resolution:

The Conference in Modern Foreign Languages of the National Education Association, held in San Francisco, July 12, 1911, emphasizes its indorsement of the simplified-spelling movement. It recommends to the Simplified-Spelling Board, of New York City, the desirability of a conference with the Simplified-Spelling Society of Great Britain to the end of securing such action as will promote the progress of the movement in the civilized world.

The same conference suggests an effort to obtain governmental co-operation in so far as such a step appears feasible to the Simplified-Spelling Board.

The meeting then adjourned.

A. Gideon, *Chairman*

THIRD SESSION—THURSDAY FORENOON, JULY 13, 1911

The department was called to order by President H. M. Barrett at 9:50 A.M. In the absence of the secretary, Robert T. Adams, superintendent of schools, Warren, Pa., was appointed secretary *pro tempore*, after which the following program was presented.

1. President's Address—"The High-School Teacher Himself"—H. M. Barrett, principal of Central High School, Pueblo, Colo.

2. "Extra-Classroom Activities in High School—Their Place and Their Importance," Rufus C. Bentley, associate professor of secondary education and high-school visitor, Leland Stanford Junior University, Stanford University, Cal.

3. "Social Functions," John C. Hanna, principal of high school, Oak Park, Ill. (In Mr. Hanna's absence, this paper was read by J. Stanley Brown.)

4. "School Publications, Literary and Musical Organizations, Dramatics," Gilbert N. Brink, principal of high school, Berkeley, Cal.

5. "Report of the Committee on Cosmopolitan High-School Curriculum," Spencer R. Smith, principal of Wendell Phillips High School, Chicago, Ill., chairman. This report was unanimously adopted.

Following these papers a general discussion took place. in which the following contributed: F. F. Nalder, deputy state superintendent of public instruction, Olympia, Wash.; Gilbert M. Brink, principal of high school, Berkeley, Cal.; Lewis B. Avery, principal of high school, San José, Cal.; Charles E. Keyes, principal of high school, Oakland, Cal.; Miss K. M. Smith, principal of Spartan High School, Nevada; Miss Emma Breck, teacher of English in high school, Oakland, Cal.; Oliver S. Westcott, principal of Waller High School, Chicago, Ill.

J. Stanley Brown, chairman of the Committee on Nominations, after explaining the qualifications necessary for the officers of the department, presented the following names for officers for the following year:

For *President*—J. Calvin Hanna, principal of high school, Oak Park, Ill.
For *Vice-President*—Edward L. Brown, principal of North Side High School, Denver, Colo.
For *Secretary*—Clarence D. Kingsley, Manual Training High School, Brooklyn, N.Y.

The report of the Committee on Nominations was received and the officers were unanimously elected.

The following resolution was presented:

Resolved, That the Secondary Department indorse the action of the Mathematics Round Table in indorsing the report of the National Committee of Fifteen on Geometry Syllabus, and authorizing the publication of the report in such manner as shall be determined by the Secretary of the National Education Association and the chairman of the committee.

It was moved that hereafter in making out the programs, the words "Section of the Department" should be substituted for the words "Round Table Conference."

The meeting then adjourned.

R. T. ADAMS, *Secretary pro tempore*

The following record is added by the undersigned, secretary, to supplement the secretaries' minutes of this department for the past three years, as follows:

COMMITTEE ON COSMOPOLITAN HIGH-SCHOOL CURRICULUM

At the Cleveland meeting in 1908 resolutions were passed authorizing the appointment of this committee, which was subsequently named by President J. Stanley Brown, as follows:

Spencer R. Smith, principal Wendell Phillips High School, Chicago, Ill., *Chairman.*
William McAndrew, principal Washington Irving High School, New York, N.Y.
Cheesman Herrick, president Girard College, Philadelphia, Pa.
I. I. Cammack, principal Central High School, Kansas City, Mo.
David MacKenzie, principal Central High School, Detroit, Mich.
George Edward Marshall, principal High School, Davenport, Iowa.
William B. Owen, principal Chicago Teachers College, Chicago, Ill.

COMMITTEE ON ARTICULATION OF HIGH SCHOOL AND COLLEGE

The resolution authorizing the appointment of this committee was passed at the Boston meeting in 1910, and the committee was subsequently named by President H. M. Barrett, as follows:

Clarence D. Kingsley, Manual Training High School, Brooklyn, N.Y., *Chairman.*
William M. Butler, principal Yeatman High School, St. Louis, Mo.
Frank B. Dyer, superintendent of schools, Cincinnati, Ohio.
Charles W. Evans, principal high school, East Orange, N.J.
Charles H. Judd, professor of education, University of Chicago, Chicago, Ill.
Alexis F. Lange, dean of college faculties, University of California, Berkeley, Cal.
W. D. Lewis, principal William Penn High School, Philadelphia, Pa.
William Orr, deputy commissioner of education, Boston, Mass.
William H. Smiley, principal East Side High School, Denver, Colo.

COMMITTEE OF FIFTEEN ON NATIONAL GEOMETRY SYLLABUS

The Mathematics Round Table of the Department of Secondary Education at the Cleveland meeting in 1908 expressed a desire for the appointment of this committee, but it was not appointed.

During the following year the Federation of Teachers of Natural and Mathematical Science appointed a committee of fifteen for the same purpose. At Denver in 1909 the Secondary Department took up the matter again and ratified the committee of fifteen already appointed to act under the joint auspices of the two associations. This was done on motion of President J. Stanley Brown. The personnel of this committee appears in the minutes of the Mathematics Round Table, as given above.

This record is deemed important to be added, since, on recommendation of the Committee of the National Council on Investigations and Appropriations, appropriations were made by the Board of Directors at its meeting in San Francisco, July 13, 1911, as set forth in the minutes of that meeting, for the future work of each of these committees.

IRWIN SHEPARD, *Secretary*

PAPERS AND DISCUSSIONS

REPORT OF THE COMMITTEE OF NINE ON THE ARTICULATION OF HIGH SCHOOL AND COLLEGE

CLARENCE D. KINGSLEY, MANUAL TRAINING HIGH SCHOOL, BROOKLYN, N.Y.

To the Secondary Department of the National Education Association:

Your Committee upon the Articulation of High School and College herewith submits the following report:

At the meeting of this department in Boston, July 6, 1910, resolutions were introduced requesting colleges to discontinue the entrance requirement of two foreign languages and to recognize as electives all subjects well taught in the high school. These resolutions furthermore stated that the public high schools will be greatly hampered in their attempts to serve the best interests of boys and girls until such modification is made by the colleges. These resolutions were adopted with only one dissenting vote.

In accordance with the spirit of these resolutions, your committee of nine was appointed to prepare a rational statement of the work that the high school should do. To carry out this purpose, the committee submits:

A. Some preliminary considerations on the field and function of education in the high school,
B. A working definition of a well-planned high-school course, and
C. Reasons for the adoption of this definition as the basis of college admission.

A. SOME PRELIMINARY CONSIDERATIONS ON THE FIELD AND FUNCTION OF EDUCATION IN THE HIGH SCHOOL

1. Dr. Henry S. Pritchett, in his *Annual Report* as president of the Carnegie Foundation, finds that American education, from elementary school to college, is suffering from the attempt to teach too many subjects to the same student at the same time. He believes that students taking the newer subjects should not be required to carry all the older subjects. He states emphatically that this is no argument against the enriched curriculum of the high school; but that, on the contrary, the high school must go on still further enriching its curriculum, and that it is the duty of the college to adjust itself to the high school thus broadened.

2. It is the duty of the tax-supported high school to give every student instruction carefully designed to return to society intelligent, able-bodied, and progressive citizens. To this end certain work should be included in the course of every student, whether or not he contemplates entering a higher institution. The responsibility of the high school in this matter cannot be delegated to the college because there is no guarantee that the particular student will actually go to college.

3. It is coming to be recognized that in a democratic society the high school has a distinct function. The high-school period is the testing time, the time for trying out different powers, the time for forming life purposes. Consequently, the opportunity should be provided for the student to test his capacity in a fairly large number of relatively diverse kinds of work.

In the high school the boy or girl may very properly make a start along the line of his chosen vocation, but a final choice should not be forced upon him at the beginning of that career. If he makes a provisional choice early in the course, there should be ample opportunty for readjustment later in the high school. For this reason the requirement of four years of work in any particular subject, as a condition of admission to a higher institution, unless that subject be one that may properly be required of all high-school students, is illogical and should, in the judgment of this committee, be immediately discontinued.

4. Not only is it the duty of the high school to lay the foundations of good citizenship and to help in the wise choice of a vocation, but it is equally important that the high school should make specific contribution to the efficiency of the individual along various broad lines. In our industrial democracy the development of individual aptitudes and unique gifts is quite as important as the development of the common elements of culture. Moreover, hard work is to be secured not by insistence upon uniformity of tastes and interests, but by the encouragement of special effort along lines that appeal to the individual. Our education would gain in power and in virility if we made more of the dominant interest that each boy and girl has at the time. It would seem that some have come to believe the oft-repeated statement that the liberal should precede the vocational; but an organic conception of education demands the early introduction of training for individual usefulness, thereby blending the liberal and the vocational; for only then does the liberal receive its social significance and importance. In other words, the boy who pursues both the liberal and the vocational sees the relation of his own work to the work of others and to the welfare of society;

whereas the liberal without the vocational leaves him a mere spectator in the theater of life, and the boxes in this theater are already overcrowded.

5. Mechanic arts, agriculture, or household science should be recognized as rational elements in the education of all boys and girls, and especially of those who have not as yet chosen their vocation. Under the authority of the traditional conception of the best preparation for a higher institution, many of our public high schools are today responsible for leading tens of thousands of boys and girls away from the pursuits for which they are adapted and in which they are needed, to other pursuits for which they are not adapted and in which they are not needed. By means of exclusively bookish curricula false ideals of culture are developed. A chasm is created between the producers of material wealth and the distributors and consumers thereof.

The high school should in a real sense reflect the major industries of the community which supports it. The high school, as the local educational institution, should reveal to boys and girls the higher possibilities for more efficient service along the lines in which their own community is industrially organized.

Our traditional ideals of preparation for higher institutions are particularly incongruous with the actual needs and future responsibilities of girls. It would seem that such high-school work as is carefully designed to develop capacity for and interest in the proper management and conduct of a home should be regarded as of importance at least equal to that of any other work. We do not understand how society can properly continue to sanction for girls high-school curricula that disregard this fundamental need, even though such curricula are planned in response to the demand made by some of the colleges for women.

B. A WORKING DEFINITION OF A WELL-PLANNED HIGH-SCHOOL COURSE

In view of the foregoing considerations on the field and function of the high school, and to secure courses that shall be sound as integral parts of the larger educational process, your committee recommends the adoption of the following definition of a well-planned high-school course:

1. THE QUANTITATIVE REQUIREMENT SHOULD BE FIFTEEN UNITS.

"A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work." This definition "assumes that the length of the school year is from thirty-six to forty weeks, that a period is from forty to sixty minutes in length, and that the study is pursued for four or five periods per week." It further assumes that two hours of manual training or laboratory work are equivalent to one hour of class room work.

We believe that fifteen units is a better requirement than sixteen units, because:

1) Quantity should be subordinated to quality.
2) Overstrain should be eliminated from the atmosphere of the school.
3) There should be one unit leeway, inasmuch as failure in one unit in one year should neither cost the student an extra year nor tempt the principal to permit such student to try to carry an extra unit the succeeding year.
4) Students of exceptional ability should be permitted to earn five units per year, thereby shortening the high-school period by one year.
5) Students poor in ability should be required to spend five years upon the course, attempting and performing three units each year, thereby diminishing failures and reducing excessive per capita cost of instruction.

Where fifteen units is adopted as the required number, it would seem reasonable that physical training and chorus singing should not be counted toward the fifteen units.

We further recommend that the practice of admitting students to college weighted down with conditions be disapproved on the ground that it is injurious to the student, to the high school from which he comes, and to the college to which he goes.

2. EVERY HIGH-SCHOOL COURSE SHOULD INCLUDE AT LEAST THREE UNITS OF ENGLISH, ONE UNIT OF SOCIAL SCIENCE (INCLUDING HISTORY), AND ONE UNIT OF NATURAL SCIENCE.

1) *English.*—There is at the present time almost unanimous agreement among high-school and college authorities that three or four units of English should be required of all. But the high school should be granted freedom to adapt the work to the real needs of its boys and girls. A course that is good in one high school may not be suited to the needs of another high school. Uniformity in this subject is utterly disastrous.

2) *Social science* (including history).—High-school courses in history should always be taught so as to function in a better understanding of modern institutions, current events, and present movements.

Courses in economics should be encouraged. Economic discussions are paramount and ignorance of economic principles is appalling.

Every high-school student should be given a practical knowledge of affairs in his own community, political, industrial, and philanthropic; of the basic principles of state and national politics; and of movements for social reform and international peace.

Any high-school course that secures part or all of the above results should be given full recognition.

3) *Natural science.*—Where a unit of introductory science is taught, it should be recognized as fulfilling the minimum requirement in natural science.

In some schools an introductory course has been worked out based upon physics, with a minimum of principle and a maximum of application, as most advantageously meeting the needs of the pupils. In such a course there should be strict insistence upon accuracy and neatness in the presentation of note-books and laboratory exercises. Opportunity should be given for individual pupils to work along special lines, and to make contributions out of their studies to the work of the class as a whole.

In other schools introductory science is based largely upon biology. General biological material is used to explain human functions. Personal hygiene, including sex hygiene, is taught. Special attention is paid to problems of ventilation, sanitation, and the elimination of preventable diseases. Effort is made to secure intelligent co-operation with health authorities and to form public opinion regarding higher standards of health. A certain amount of physics and chemistry is also introduced in this course.

Either of these introductory courses would be placed intentionally in the first or second year of the high school.

4) *Physical training.*—Systematic physical training, consisting of exercises and team games, should be required of all students; but this work should not be regarded as counting toward the fifteen required units.

3. EVERY HIGH-SCHOOL COURSE SHOULD INCLUDE THE COMPLETION OF TWO MAJORS OF THREE UNITS EACH AND ONE MINOR OF TWO UNITS, AND ONE OF THE MAJORS SHOULD BE ENGLISH.

Irrespective of the possibility that the student may go to a higher institution, it is desirable for him to do in the high school a certain amount of work of an advanced character. This provision also makes it possible for a part of the work in college to be a continuation of work done in the high school, thereby preserving continuity in the educational process.

We recommend that the following be recognized as majors:

a) 3 units of English. (Required of all.)
b) 3 units of one foreign language (Latin, German, French, or Spanish).
c) 3 units of mathematics. (To include elementary algebra and plane geometry, and selections from plane trigonometry, solid geometry, intermediate algebra, and advanced algebra.)
d) 3 units of social science. (To include selections from history, civics, economics, municipal affairs, and history of industry or commerce.)

e) 3 units of natural science. (To include selections from an introductory science course, physics, chemistry, astronomy, agriculture, physiography, elementary biology, advanced physiology, botany, and zoölogy.)

4. THE REQUIREMENT IN MATHEMATICS AND IN FOREIGN LANGUAGES SHOULD NOT EXCEED TWO UNITS OF MATHEMATICS AND TWO UNITS OF ONE LANGUAGE OTHER THAN ENGLISH.

For admission to engineering courses, the requirement of a major in mathematics appears reasonable.

For admission to a distinctively literary or classical course, the requirement of a major in one foreign language appears reasonable.

For other students a requirement of more than two units of mathematics and two units of one language, when not in accord with the dominant interests and aptitudes of the student, appears excessive.

5. OF THE TOTAL FIFTEEN UNITS, NOT LESS THAN ELEVEN UNITS SHOULD CONSIST OF ENGLISH, FOREIGN LANGUAGE, MATHEMATICS, SOCIAL SCIENCE (INCLUDING HISTORY), NATURAL SCIENCE, OR OTHER WORK CONDUCTED BY RECITATIONS AND HOME STUDY.

THE OTHER FOUR UNITS SHOULD BE LEFT AS A MARGIN TO BE USED FOR ADDITIONAL ACADEMIC WORK OR FOR MECHANIC ARTS, HOUSEHOLD SCIENCE, COMMERCIAL WORK, AND ANY OTHER KIND OF WORK THAT THE BEST INTERESTS OF THE STUDENT APPEAR TO REQUIRE.

No limitations should be imposed upon the use of the margin except that the instruction should be given by competent teachers with suitable equipment in classes not too large, and that the student's work should be of a satisfactory grade.

The recommendation that the subjects from which the margin may be made up should be left entirely unspecified appears to be vital to the progressive development of secondary education. As long as formal recognition must be sought for each new subject, so long will the high school be subservient and not fully progressive. It ought to be possible for any strong high school at any time to introduce into its curriculum a subject that either meets the peculiar needs of the community or that appears to be the most appropriate vehicle for teachers of pronounced individuality.

This margin of four units is not excessive. It amounts to an average of only one unit a year. A course containing eleven units of academic or prepared work requires the student to carry, practically thruout the course, three of these subjects at a time. In general, this involves the preparation of three lessons a day outside of the classroom. A daily assignment of more than three lessons together with manual training or vocational work in school hours, is not conducive to a high standard of excellence. In many of our high schools girls, especially, are subjected to a scholastic routine not designed to develop a strong race, either physically or mentally. (Note.—Placing the number of required units of academic or prepared work at eleven instead of twelve allows a leeway of one unit in case of a failure in the academic work. In case of no failure, by taking four units each year the student may accomplish either an extra academic unit or an extra vocational unit.)

The provisions of the foregoing definition may be summarized as follows:

Nine specified units.—

3 units of English.
2 units of one foreign language.
2 units of mathematics.
1 unit of social science including history.
1 unit of natural science.

Two additional academic units.—

One or both of these units must be advanced work to meet the requirement of a second major of three units.

Four units left as a margin for whatever work best meets the needs of the individual.

C. REASONS FOR THE ADOPTION OF THIS DEFINITION AS THE BASIS OF COLLEGE ADMISSION

College admission should be based solely upon the completion of a well-planned high-school course. The committee submits the following argument in defense of this proposition.

First: On the one hand, many students do not go to college because they took those courses which were dictated by their aptitudes and needs instead of courses prescribed by the colleges.

A committee of the Boston Head Masters' Association, in a report approved by that association last fall, stated the difficulty as follows: "It frequently happens that a pupil in the public high school does not discover that he is likely to go to college until one, two, or three years of the high-school course have been completed. As matters stand now, many of the courses in which he has received instruction and in which he may have done excellent work are entirely useless to him in so far as he may apply them to the purposes of college admission. The Committee are of the opinion that this is decidedly wrong."

The idea that the student should, early in his high-school course, decide whether he is going to college ignores one of the chief functions of the high school; namely, that of inspiring capable students with the desire for further education. It is coming to be clearly recognized that the chief characteristic of education in a democracy as contrasted with that in a society dominated by class distinction, is the principle of the "open door." This principle of the "open door" is part of the great idea of the conservation of human gifts. It demands that personal worth should be recognized wherever found. The college is one of the many doors that should be kept open. The colleges themselves bear tribute to this principle in the innumerable scholarships that they offer to boys and girls in humble circumstances. In fact, it has long been recognized in this country that one boy who seeks a college education because of a strong inner purpose in the face of obstacles is worth to the college and to society a dozen boys who go to college merely because it is regarded as the proper thing to do.

Second: The attempt that is often made to supplement the work now required by the colleges with such additional work as is required by the community and by a more adequate understanding of the needs of real boys and girls, is highly unsatisfactory. May 7, 1910, the High School Teachers Association of New York City issued a statement in which they affirmed:

"We believe that the interests of the forty thousand boys and girls who annually attend the nineteen high schools of this city cannot be wisely and fully served under present college-entrance requirements. Our experience seems to prove the existence of a wide discrepancy between 'preparation for life' and 'preparation for college' as defined by college-entrance requirements.

"The attempt to prepare the student for college under the present requirements and at the same time to teach him such other subjects as are needed for life is unsatisfactory. Under these conditions the student often has too much to do. The quality of all his work is likely to suffer. The additional subjects are slighted because they do not count for admission to college. In such a course it is impossible for the student to give these subjects as much time and energy as social conditions demand."

Third: Even by faithfully following the usual college prescription, the best preparation for college is not secured. Abraham Flexner, in his book *The American College*, shows how the college is standing in its own way. He says that "The motive on which the college vainly relies, self-realization, has got to be rendered operative at the earlier stage." "As a matter of fact," he adds, "the secondary period is far more favorable than the college to free exploration of the boy." The restrictive preparatory courses prescribed by the colleges do not afford the kind of experience needed in the high school.

Fourth: In the attempt to prepare for the widely varying requirements of different colleges the energies of the school are dissipated. The energy that should be devoted to meeting actual individual needs of students is expended upon the study of college catalogs. An institution that should be encouraged to develop internally is made subordinate and subservient. As an illustration of the confusion in the requirements of different colleges, we find that one college requires one foreign language, counts work in a second, and gives no credit for a third; another college requires two foreign languages, and requires one unit in a third, unless music or physics is presented as a substitute; and a third college absolutely requires three foreign languages.

Fifth: But by far the most serious objection to the present condition is, as Commissioner Snedden says, to be found in the restrictive effect upon true high-school development. The high school today is the arena in which our greatest educational problems should be worked out. High-school attendance in this country has increased almost fourfold within the last twenty years. If the college will recognize the true function of the high school this marvelous growth will continue unabated and the American high school will become an institution unparalleled as a factor for democratic living. It is doubtful whether any nation ever before possessed such an opportunity.

SUPPLEMENTARY REPORT

The committee submits the following additional statement and recommendation:

The universal education to which our institutions are now committed is radically different from the education for a literary class to which we were formerly devoted. So long as our education was designed for the few it was possible to require candidates for that education to conform to a certain definite intellectual type, and to reject all other candidates. That type was defined in terms of Latin, Greek, and Mathematics —substitutes not allowed. This definition actually debarred many individuals who did not entirely conform to the type but who possessed other strong qualities that would have made them valuable members of the learned professions. Nevertheless, the injustice of this procedure aroused no strong opposition because there were a sufficient number of other candidates conforming to the type to fill the very limited number of positions in the then existing professions.

As soon as the advantages of a higher education made a strong appeal to a somewhat larger group of men and women, the rigor of the former requirement of Latin, Greek, and Mathematics was relaxed by reducing the amounts required and by allowing a substitution of modern language for part or all of the classical languages. This process was characterized by its opponents as "letting down the bars." Such it was, not so much in the sense that it made education easier, as in the sense that it permitted education to make its appeal to a much larger group of men and women.

We believe that the time has arrived when it is the duty of those engaged in education to consider the importance of making our education appeal to still other students. Today it is impossible in many communities for a boy or a girl to obtain even a high-school education unless he or she can do passing work in both mathematics and a foreign language. Schoolmen in general are familiar with students, usually girls, who do good work in languages, history, and certain sciences, but who cannot master high-school or college mathematics. There are other students, mostly boys, who do good work in mathematics, science, and history, but who have exceptional difficulty with foreign languages. A student of the latter type would find ample field for the exercise of all his linguistic ability in a reasonable mastery of the English language.

In the East we find a tendency to attach particular importance to the study of foreign languages, and in the West we find a tendency to emphasize mathematics. But native abilities are not geographical quantities.

We believe that insistence upon the study of mathematics and foreign language as a *sine qua non* of an education is based largely upon the belief that both are *indis-*

pensable for intellectual discipline. But we know that many of our greatest men have been deficient in one or the other of these accomplishments. They evidently secured their intellectual power by other processes. The disciplinary possibilities of other subjects are not yet fully recognized.

In view of the foregoing statement, we recommend that Section 4 of the definition of a well-planned high-school course be supplemented by the following additional statement:

4 (*a*).[1] IN PLACE OF EITHER TWO UNITS OF MATHEMATICS OR TWO UNITS OF A FOREIGN LANGUAGE, THE SUBSTITUTION UNDER PROPER SUPERVISION SHOULD BE ALLOWED OF TWO UNITS CONSISTING OF A SECOND UNIT OF SOCIAL SCIENCE (INCLUDING HISTORY) AND A SECOND UNIT OF NATURAL SCIENCE.

In other words, there should be allowed under proper supervision the selection of four units from the following:

1) Two units of one foreign language.
2) Two units of mathematics.
3) Two units consisting of a second unit of social science and a second unit of natural science.

According to this provision it would be possible under proper supervision to substitute the work in columns (B) or (C) for the work in column (A).

	(A)	(B)	(C)
English	3	3	3
Foreign Language	2	2	0
Mathematics	2	0	2
Social Science	1	2	2
Natural Science	1	2	2
Total specified	9	9	9
To which must be added to make another major	1 or 2	1	1
Total	10 or 11	10	10

Consequently the student without mathematics must present three units in two subjects and two units in the two remaining subjects, thereby demonstrating ability in four lines of work.

Similarly, the student without foreign language must present three units in two subjects and two units in the two remaining subjects.

To carry out this plan we would urge that at least many of the larger colleges should make special provision to continue the education of students of whom it has been discovered that the requirement of mathematics or the requirement of foreign language is an obstacle to the continuation of their education.

Respectfully submitted,

CLARENCE D. KINGSLEY, *Chairman*
Manual Training High School, Brooklyn, N.Y.
WILLIAM M. BUTLER,
Principal, Yeatman High School, St. Louis, Mo.
FRANK B. DYER,
Superintendent of Schools, Cincinnati, Ohio.
CHARLES W. EVANS,
Principal, High School, East Orange, N.J.
CHARLES H. JUDD,
Professor of Education, University of Chicago, Chicago, Ill.
ALEXIS F. LANGE,
Dean of College Faculties, University of California, Berkeley, Cal.
W. D. LEWIS,
Principal, William Penn High School, Philadelphia, Pa.
WILLIAM ORR,
Deputy State Commissioner of Education, Boston, Mass.
WILLIAM H. SMILEY,
Principal, East Side High School, Denver, Colo.

Committee

[1] See 4 above.

The chairman herewith appends the following statement from Professor Charles H. Judd, expressing the opinion that even greater latitude should be allowed to the high school and explaining an important principle that should at this time be brought to the attention of all concerned with the relations of school and college.

My Dear Mr. Chairman: In signing the report, I am very glad indeed to express my sympathy with the general outlines of the whole statement which is here made by the committee. It is my opinion that somewhat greater latitude should be allowed the high school in the organization of its courses. To this end, I should personally prefer that the various requirements be not specific in terms of the subjects. The only specification which I find it possible to favor is that which requires a certain amount of coherent work in the high school. To this end, I believe that it would be wiser to require two majors of three units, and one minor of two units. This is in keeping with the plan recently adopted by the University of Chicago.

One other principle should, I believe, be incorporated in any report which deals with the relations of high schools and colleges. These two institutions should follow up the work of high-school students much more completely than is now done. A student who comes from a high school into a college, should have his relative rank in the high-school class reported to the college. The work he is carrying on in the college should be carefully observed, and reports should be sent back to the high school, stating the rank of the student in college. Both institutions would profit by this exchange of information. The college would learn by such a comparative study of the student's work whether or not its courses are articulating directly with those of the high school. The high school would learn whether or not it is articulating with the college. It does not necessarily follow that the high school should in every case articulate with the college in such a way as to insure the high standing of its students in college.

Without attempting to pass on that question, however, the information that would be gained by the study of relative marks would be very valuable for the purpose of bringing to the consciousness of both institutions the character of the work which the students are able to do.

I should appreciate the opportunity of adding this comment to the report if you do not feel that it would encumber the committee's statement. In any case, I am prepared to sign the general report. These comments are merely added in the hope that the principles outlined in this report may be extended somewhat further than the committee has found it expedient to carry them.

Charles H. Judd.

THE NEW HARVARD PLAN FOR COLLEGE ADMISSION

HARVEY N. DAVIS, ASSISTANT PROFESSOR OF PHYSICS,
HARVARD UNIVERSITY, CAMBRIDGE, MASS.

What is now called the "old plan" at Harvard was adopted substantially in its present form in 1898. It is essentially a quantitative scheme. Each of the academic subjects commonly taught in high schools at that time is assigned a value in points, determined partly by the length of time required for its study and partly by the probable maturity of the student at the time in his course when it is usually undertaken. Of these points each candidate is expected to collect twenty-six, much in the same spirit that he might collect trading stamps, the possession of a complete collection entitling him to a premium in the form of a college education. Even if this collection is not quite complete, a candidate is usually admitted

"on condition" and is expected to supply the missing points later, either by attempting other admission examinations in addition to his regular work, or by "sacrificing" courses. In either case, the weaker the student, the heavier the burden which he invariably undertakes to carry in his first year, so as to keep up with his class. The number of men admitted under a handicap of this sort is appallingly large in every American college where such a system is used. At Harvard until within two years, it regularly included more than half the class. The result has been an inevitable lowering of the standards of work wherever these overloaded freshmen appeared in any numbers, and an inevitable relaxation of the minimum standard of admission thru a false belief that the system safeguarded itself.

These and other facts led the faculty about two years ago to undertake a thoro investigation of the admission situation.

It appeared that in each of the two ways in which an admission system ought to be useful, this quantitative scheme was not a success. In the first place, regarded merely as a machine for attracting and recognizing desirable freshmen, it was far from efficient. Thru its complication, its inelasticity, and its merely quantitative rigor, it was steadily opening an already overwide breach between Harvard University and the public high schools of the country. The percentage of freshmen entering from public high schools was found to be only between 40 and 45, and if three large schools near Cambridge, which are practically fitting-schools for Harvard, are omitted, the percentage of public-high-school boys was below 30. Furthermore, these freshmen were largely drawn from the immediate neighborhood, only about a fifth of them having been prepared outside of New England. And all this was largely due, I am sure, not to provincialism, but to the administrative barriers set up by peculiarities and maladjustments in the scheme of admission. It is indeed significant that of the 114 applicants who were examined at the first trial of the new plan in June, 1911, over 80 per cent were from public high schools and 50 per cent were prepared outside of New England.

But no scheme of admission is merely a mechanism of selection. It invariably has an indirect but powerful influence on the policies and standards of the schools that deal with it. Often in the past, this indirect influence has been regarded as the most valuable aspect of an admission system, and requirements have been framed, and examinations have been set, with great and even chief regard for their "educative effect upon the teachers.' This mixture of purposes I regard as extremely unfortunate. There can be no question but that, in the formative period of American high schools, some such external pressure was valuable to them. But I hope and believe that that period in their development is past, and that the colleges may now regard their admission systems solely as instruments of selection.

At any rate the "old plan" at Harvard was found to have a definite and unfortunate influence on the schools most affected by it in forcing upon them a diversified and, in its last years, a crowded program such as no boy ought to be asked to undertake. Students were obliged to carry in their final years six, seven, or even eight studies abreast, so as to have them fresh in mind at the time of their final examinations. Even the opportunity of collecting some of their points two years ahead helped little, for most of the examinations required a certain maturity of mind that few students attained so early in their training.

The result of this investigation was the adoption of a fundamentally different system, which is now administered in parallel with the old one as an alternative method of admission to Harvard College. Its exact formulation has been widely distributed as a leaflet by the University and this statement, with a detailed presentation of its advantages, can be found in *Science* for May 26, 1911. Its main features are a quantity requirement and a quality requirement.

To satisfy the quantity requirement, the student must show, by documentary evidence, that he has completed, and done well in, a high-school course covering four years and "concerned chiefly with languages, science, mathematics, and history, no one of which may be wholly omitted." There is a further requirement that at least two subjects, both of which may be languages if desired, must be "carried beyond their elementary stages." Except for these very general requirements the arrangement, content, and method of presentation are left wholly to the judgment of those most competent to decide, the secondary teachers themselves. Just what "chiefly" means was purposely left for the committee to determine; it was evidently not the intention of the faculty to change to any great extent the type of preparation desired, as for instance by accepting a large infusion of manual training or agriculture in place of such academic subjects as have previously been accepted, but the prohibition of "non-academic" subjects is not complete, and the whole spirit of the plan is that on every such undetermined point the admission committee shall use its best judgment in each individual case; it is probable, therefore, that the amount of non-academic work that will be accepted in any individual case will depend somewhat on the quality of the boy's scholarship in general and the cordiality with which he is recommended by his head master as fit to undertake college work.

In any case, it is an individual record that is approved, not a school as such—and the quality of the record is considered as well as its satisfaction of the technical requirements. To show that this consideration of quality is not merely nominal, I append the following table covering all the applications under the new plan that were received before June 5, the limiting date mentioned in the formal announcements.

Records found acceptable	114
Records refused on technical grounds	14
Records refused on quality	19
Unfinished cases	2
Total	149

If the school record is satisfactory, the applicant is allowed to present himself for examination in four subjects. One of these must always be English. If he desires the A.B. degree, another must be Latin, otherwise it may be French or German. A third must be either mathematics or physics or chemistry. The fourth may be any one of the above not already counted, or Greek, or history. These four examinations are not intended to check up either the extent or the efficiency of his high-school course—the documentary evidence is accepted as covering all that completely—they are rather intended to test whether or not the boy can think. They are to be examinations for power, and therefore, we hope, different in kind from the present examinations for attainment. Of course, the preparation of such papers is not easy and those of this first year are in many ways disappointingly like the old ones, but it is hoped that constant improvement will come thru experience and frank criticism. The method of grading is also different in that each book is to be marked, not merely with number or letter, but with a short, definite statement of the reader's impression of the boy as regards both strength and weakness.

While all this is being done, the chairman of the Admission Committee will have written to the head master of each boy asking for a frank, confidential statement of his opinion of the boy's character and attainments: Is he an earnest student? Is he in any way a leader among his fellows? Has he backbone, determination, grit? Is he, in general, the kind that ought to get into college or not? The fullness and usefulness of the replies is in most cases very gratifying.

When all the evidence has been collected, namely, a school record, an examination record, a head master's testimony, and a personal impression of the boy if he is a doubtful case and can be reached, the Admission Committee is instructed to form its best judgment in the light of all the data in hand, on the fundamental question, "Ought this particular boy to come to college in this particular year, or not?" If they decide affirmatively, he is admitted clear and given a square start. If they decide negatively, he is not admitted at all. Under the new plan there will be no handicapped or conditional admissions.

It should be noticed that this is not a certification scheme or a part-certification scheme in any sense whatever, for two reasons: In the first place, it is characteristic of a certification scheme that the head master shall "certify" that the applicant has done something prescribed by the college, namely, such and such amounts of Latin and mathematics, and so on. This certificate the college accepts in lieu of such examinations as

might test each of the facts claimed. But the final responsibility of deciding what shall be studied and how, is in the hands of the college and is exercised thru the publication of long and detailed "prescriptions" in each subject. Under the new Harvard scheme of admission the arrangement of a curriculum is wholly in the hands of the school and that is where it ought to be.

On the other hand, it is characteristic of a certification system that the final responsibility of deciding whether or not a given individual shall go to a given college at a given time is shifted from the college to the school, and that is not where it ought to be. It is true that a head master is usually the one best able to judge whether a given boy is fitted for college or not, but it is our experience at Harvard that we are much more likely to get a frank and useful expression of that judgment in the informal way mentioned above than thru any formal, thoroly protected certification system. And whenever such an expression of opinion comes, we are inclined to give it very great weight.

There remains the question as to whether all this is not in reality "lowering the standard." As far as the college is concerned, I can answer confidently that it is not. Harvard College is not adopting this scheme in order to secure an increase in numbers or as a graceful way of retiring from the enforcement of the present high standard of admission. What we do want is to get access to a large group of potential freshmen, so that those we do admit may be of thoroly good quality. We want to make it possible for the best boy in any high school in the United States to enter Harvard clear, on a few weeks notice, without extra cramming and without any administrative friction. It is for these best students that the new scheme is primarily designed. If I interpret rightly the spirit of the rest of the Admission Committee, I can guarantee that the new plan will not lower the standard of the freshman class.[1]

Whether the universal adoption of a plan like this, which lacks even the "inspection" common in the West, would tend to lower the standard of work within the secondary schools themselves, is another matter. Many schoolmasters have told us that the schools still need and depend on pressure from above and it may be that the freedom offered by the new scheme may handicap them in the constant fight that all of us have to make to maintain high standards. But this I personally cannot believe. I have come more and more to feel that to give the school men both full power and full responsibility in administering their own work, is the only wise, safe, and just thing for an American college to do.

[1]Addendum, September 27, 1911: The final results for both June and September, 1911, are as follows:

		Per cent
Total refused before examination	48	25
Total refused after examination	59	31
Total admitted clear	83	44
Total applied under new plan	190	

THE NEW UNIVERSITY OF CHICAGO PLAN FOR COLLEGE ADMISSION

OTIS W. CALDWELL, ASSOCIATE PROFESSOR OF BOTANY, THE UNIVERSITY OF CHICAGO, CHICAGO, ILL.

Two years ago fifteen members of the University of Chicago faculty were asked to serve as a curriculum committee to make a careful investigation of the courses of study in the different colleges of the University. This committee was composed of members from the instructional and administrative staffs of the Colleges of Arts, Literature, Science, Philosophy, Commerce, and Education, and its work related more or less to each of these colleges. There were several reasons for the appointment of this committee. One of these was found in the lack of close articulation between the work of the first years of college and that of the schools from which the students come. The public high schools are meeting the needs of the communities they serve by introducing courses of instruction and a significance of content and vitality of method which together have for some time presented to the colleges a new and highly important situation. When the public high school was being established the colleges rendered much assistance by outlining the courses for it. But now it is an autonomous institution, and its competent faculty is studying its problems to the end that it may serve its community in the most efficient, democratic way. This, in its influence upon the high-school students who desire to enter college, sometimes forces them to take a high-school course quite different from that of their fellows; sometimes, in case of students who late in their high-school course decide that they wish to go to college, it prevents them from so doing and sometimes causes the student upon entering college to be conditioned by several units of work. Of the 450 Freshmen entering the University of Chicago on October 1, 1910, 150 were conditioned, and in many other institutions the showing is no better. One large university is said to have conditioned 53 per cent of its entering class last autumn—the amount of conditions varying from one to seven units. These conditions, in themselves a direct confession of weakness of the college plan, presented one phase of the problem. Another aspect was presented in the difficulty of arranging first-year college courses to fit the educational needs of students who enter with varying amounts of entrance units. Still another problem of the committee was found in the difficulty in securing from the curriculum of the different colleges of the University a sufficiently large number of coherent and progressive courses: (1) to give purposeful college students a wide range of choice of careers for which they may prepare while in college; and (2) to enable the administrative officers to stimulate students of less purpose—of the drifting class—to select coherent sequences of courses that may give them definite and more intensive preparation for effective work when out of college.

At the outset it became evident that extensive changes were advisable, both with reference to our relations to high schools and in the organization of the curricula in the colleges. As a result of almost two years' study of the situation, with the assistance and co-operation of those who are directly interested in high-school work, a new plan was drawn up. This was passed almost unanimously by the general faculty early in June of this year.

The plan provides one specific requirement of three units (three years) in English. This English is expected to give reasonable facility, accuracy, appreciation, and readiness in use of the mother-tongue, and the University will look for these attainments rather than to the particular content and method of the English course, which latter points the high school is expected to determine in the light of its own immediate study of work. Other than these three units of English, no specific subject requirement is made. Requirements based upon recognized educational principles are made in the following way:

Those subjects that have long been recognized in high schools are arranged in six groups, as follows:

1. English
2. Ancient Languages (Latin and Greek)
3. Modern Languages other than English; German, French, Spanish
4. Ancient History, Mediæval and Modern History, English History, United States History, Civic Economics
5. Mathematics
6. Sciences, Physics, Chemistry, Botany, Zoölogy, General Biology, Physiology, Physiography, General Astronomy

English, as stated above, is represented by a requirement of three units. From some one of the five remaining groups the student is expected to take a principal sequence of at least three units, and from another, a secondary sequence of at least two units, and in all from the six groups he is expected to present ten units.

If Greek, Latin, or one of the modern languages is chosen for either primary or secondary sequence, the three or two units, as the case may be, must be in a single language. Also not less than one unit of physics or chemistry may be offered, and not less than half a unit of any other subject.

When presented not as a primary or secondary sequence of units, not less than one unit will be accepted in Greek, Latin, any modern language, mathematics, physics, or chemistry; and Latin may not be continued in college unless at least two units are presented.

In addition to the ten units thus provided for above, five additional units are required. These may be offered in any subject for which the high school gives credit toward its own diploma. This means that these five units may consist of any high-school vocational subjects, as agriculture, domestic science, commercial arithmetic, bookkeeping, stenography,

manual training, etc.; or they may be presented in addition to the ten units from the groups given above, including English. The whole plan therefore provides specifically for three units in English; for a principal sequence of three units and a secondary sequence of two units to be chosen from five great groups of subjects; for two additional units also from the five groups; five units from any subject offered by the high school; not less than one-half a unit in any subject; entrance with conditions will not be permitted.

It is thus possible for a student to come to college with work in but three of these six branches of knowledge. It is also possible for him to come to college having work in all of them. In any event, another part of the plan adopted insures that during his first two years in college and his high school together he shall have attained acquaintance with the fundamental aspects of each field of knowledge. Thus the two principles of intensification and distribution are cared for.

Obviously this plan is an attempt to place college entrance upon an educational basis instead of a basis of keeping accounts. It asks for a good quantity and quality of training in the use of the nation's language. It asks for sequential work in enough lines of study to lay a foundation in scholarship, and leaves entirely to pupils, high-school teachers, and community to decide what those lines of study shall be. It recognizes vocational studies as having educational and cultural value quite worthy of place in the preparation of students for college work. Indeed, we recognize these as subjects needed quite as much in order that students who go to college may not lose their social and industrial perspective as that those who do not go to college may utilize these subjects in practical affairs.

This plan is intended to leave the secondary schools free to experiment and find the methods and subjects best adapted to develop socially efficient and scholarly students. It is hoped that the plan may open the way for a genuine co-operation in the study of the many unsolved problems of democratic education, and may encourage both schools and colleges to careful experiments in the subjects, methods, and results of our teaching. Effective democratic education for all the pupils in the high school is needed by the community; and is at the same time better for future college work than any narrowly prescribed academic training.

High schools that are in co-operation with the University of Chicago and which meet these broad requirements will be asked to maintain a quality of work that produces efficient students, and inspection will be upon that basis. Upon recommendation of the faculty of the co-operating high school its graduates are admitted to the University without examination, and the school will be tested by the ability of its graduates to do good work, as indeed are those of its graduates who go from high school into positions of employment. If a considerable percentage of its pupils fail to carry their work the school will be taken from the list of co-operating

schools, until upon further inspection its product seems likely to succeed. A carefully prepared record of all students will be sent regularly to their respective high schools, thus enabling both high schools and college to test their efficiency, not by a single examination or by a single student, but by a continued investigation of the ability of students to do efficient work.

For several years a rigid method of grading students has been in force in the colleges of the University. By use of this method inefficient students are eliminated early in the course, the less efficient, the earlier they are eliminated. Over 100 students have thus been dropped in each of the past two years.

As a means of further co-operation, and to secure the most effective teaching in the beginning of college courses, we have invited a large committee of high-school men to visit, a few at a time, and over prolonged periods, those courses in the University which students take during their first years in college. We shall expect pointed and valuable suggestions from these "college inspectors," and I suspect must be prepared to defend ourselves or eliminate some questionable practices in college teaching.

The general plan adopted by the faculty also includes regulations thru which we hope better to meet the needs of college students all thru their college course. These bear a definite relation to college entrance. There is not time and this is not the place to go into detail with that phase of the question, but an outline will show its significance.

In the first year of college work the student must continue the subject of his primary or secondary sequence offered for admission, except in special cases students may continue a last-year full-unit subject. This last provision is made possible since high-school students often find themselves in some subject of their last year's work. Also during the first two years, preferably the first year, the student must take three majors of English, one major of public speaking being included therein. Also in two years the student must, together with the high-school work presented, take as much as four majors in each of the groups 2 to 5, listed above. This insures acquaintance with the great divisions of human knowledge, and if high-school work has been arranged as herein outlined, this plan still leaves the student considerable election in the college. Furthermore, during the last two years of college work the student, with what he has done in the first two years, must complete nine majors in one department and six majors in another. He may not take more than fifteen majors in one department. Thus we plan to secure intensification within departments in which the student wishes especial preparation, and also secure distribution which gives general cultural acquaintance.

THE HIGH-SCHOOL TEACHER HIMSELF

H. M. BARRETT, PRINCIPAL OF CENTRAL HIGH SCHOOL, PUEBLO, COLO.

A touring car stopped one day not long ago, for no apparent reason, on the open plain about half-way between Colorado Springs and Pueblo. The owner, who was driving, got out and went over the things that he thought might be out of order. He found that there was plenty of gasoline, tightened the battery connections, tried the spark plug, removed some dirt from the carburetor. Then he set the throttle and spark and tried to crank up, but there was no response from the engine. After two or three unsuccessful efforts he went over the whole car item by item, trying to find the seat of trouble, but without success. Then, thinking things unutterable, he tramped a couple of miles to the nearest flag station and wired to Pueblo for a man from a garage to come out in a car and tow him in. It happened that at the time all the cars were out of the garage, but as there was a train going north in a few minutes, the man assigned to the job seized his repair kit and took the train for the place named in the telegram. His appearance before the owner of the car, on foot with nothing but his repair kit, evoked an explosion which might have been valuable if it could have been induced in the engine of the stranded car. The man from the garage quietly explained that he had to come on the train or not at all, and asked the irate man what he had done in attempting to start. With as much calmness as could be expected the details were gone over. "Well," said the man from the garage, "it must be something serious. I'll take a look at her."

He raised the hood, examined the engine for a minute and closed the hood again. Then he reached under the seat, and turning to the owner, said "Jump in." He gave the crank a turn and immediately the reassuring chug of the engine answered. He took his seat behind the wheel, threw in the low gear, and the car started on its way. "What did you do to it?" demanded the owner, with a suggestion of mingled disgust and relief. "Turned on the gasoline," answered the man from the garage.

The high school today is a somewhat more complicated machine than was the old academy. The academy long ago fell behind the needs of the times and one after another its needs were supplied. The curriculum has been tinkered up. New discoveries have been applied: lines of improvement have been added, such as science with laboratory methods, manual training, elementary agriculture, household science and art, moral training, special classes for physical and mental defectives and other special classes for the super-normal. The high school has been exploited as a social center, a *Turnverein*, a machine shop, an agricultural experiment station, a carpenter shop, a millinery store, a public playground, a summer garden, a theater, a hotel, a hospital—not to say an infirmary—and sometimes its unkind critics declare that it has actually become a mortuary

establishment. Truly it would seem that, so far as equipment and opportunity are concerned, the best modern high school leaves little to be desired, and yet our presence here and the program of this department indicate that we are still tinkering up the engines. Of course all this is desirable and necessary; it marks the divine discontent which is the essential element of progress, and we shall keep at it until the machine goes to our satisfaction, perhaps until we are arrested for exceeding the speed limit, or until the cost of upkeep on the machine compels us to dispense with experts imported at heavy expense to tell us that we have forgotten to turn on the gasoline. We have, in fact, been adjusting and elaborating the course of study and methods of teaching, and correcting astigmatism, and removing adenoids—and now we have come to the point where there is need to devote serious attention to the most important and indeed the most accessible factor—the high-school teacher himself.

Not that the high-school teacher has received no attention. At the Los Angeles meeting of the National Education Association in 1907 an important feature of the Secondary Department program was the "professional preparation of the high-school teacher." The report of the committee was most valuable, as have been investigations in the same line by other students of education, published in many books, periodicals, and pamphlets and too little studied by high-school teachers; but there is still a field which must be cultivated by the individual teacher if there is to be a high-school education adequate to the needs of America. And this is the high-school teacher himself—the personal side. It includes the professional side and much more. This somewhat neglected, altogether obvious and absolutely vital element, it is the purpose of this paper to point out. It is hoped that the brief suggestions given here may serve to direct attention to a matter which demands the earnest consideration of every man or woman who calls himself a high-school teacher.

When the Roman orator was analyzing the qualities which made Pompey a successful general he mentioned last the quality *felicitas*, good luck. He did not elaborate it but suggested that while it is not permitted to any man to boast of this quality as his own, it is proper to appreciate it and to speak of it in others, just as it is fitting for men to refer with gratitude to the gifts of the gods.

"Well," said Mr. Hinnessey with resignation, "we are as the Lord made us." "No," replied Mr. Dooley judicially, "Lave us be fair, lave us be fair; lave us take some of the blame ourselves."

The first suggestion for the high-school teacher himself has to do with his attitude toward his work, toward the school, toward the boys and girls. This attitude is fundamental—some are born with it, some acquire it gradually, and some have it thrust upon them by an experience like that of Saul of Tarsus upon the Damascus road. Using a term pedagogical,

it may be named in Dr. Stanley Hall's word "orientation." Stevenson defines the attitude:

> There is an idea abroad among moral people that they should make their neighbors good. One person I have made good: Myself. But my duty to my neighbor is much more nearly expressed by saying that I have to make him happy—if I may.

The high-school teacher is to make himself good and his boys and girls happy. Does that sound too much like molly-coddling, like soft pedagogy? Listen!

In a New York periodical recently there was an article on the corner-stone laying of the new Washington Irving High School. The writer tells something of the methods employed at this high school which may or may not be pertinent to the corner stone. He says that an old-fashioned schoolmaster from up state, who was visiting Principal McAndrew, inquired if girls in that school were not sometimes "sent to the office." "Oh, yes, indeed," replied the principal. "Here comes one now." A girl entered the office smiling expectantly. She handed the principal a drawing which she had just finished. "That's fine!" was the principal's enthusiastic comment. "Isn't it?" he asked, handing it to the visitor. And the girl went out, still smiling and radiantly happy. And it is said that the Washington Irving High School has a high reputation for scholarship.

In Cincinnati two years ago, I visited a continuation school for boys employed in the local machine shops. When I asked the teacher, Mr. J. Howard Renshaw, what he taught these boys, he answered: "Applied mathematics, applied drawing, applied science, and culture." "What was the fourth subject?" I asked, for after the straitest of the sect I had always lived in the faith that culture was not to be found except in the Greek and Latin classics. Mr. Renshaw repeated the word "culture." "Would you mind explaining just what you mean by that?" I asked. "Just this," was the reply. "These boys who come here are apprentices working at low wages for four years. If they complete their apprenticeship they get a bonus of a hundred dollars at the end—if they stop before the end they get none of it. Many of them when they come to the continuation school have just found themselves in a four-year Marathon, and they haven't their second wind yet. And they are sore—sore at the boss, sore at their job, and sore at life in general. I make it a point the first thing to see that no boy goes out of here unless he is in a good humor." Can this culture be the real thing? Did somebody say of those old Greeks that they "went about their hardest tasks like noble boys at play"?

Leaving this matter of attitude, the second thing to be noted is that the high-school teacher must have an appreciation of and a devotion to exact scholarship. If this seems in any way inconsistent with the cheerful attitude, we need not worry about it. Life is full of inconsistencies; in fact, one trouble with the high-school teacher is likely to be that he

steadfastly refuses to admit the existence of exceptions or inconsistencies. This appreciation of exact scholarship and the requirement of it in pupils is a fixed habit of mind which education ought to give to the high-school teacher. I remember that my old Greek professor used to say, "There are some things which if a man does not learn before he is four years old he never learns." It is not certain that a passion for exact scholarship is one which the high-school teacher himself must acquire before his kindergarten stage, but a natural bent in this direction is a powerful directive influence in later education. Yet if one have it not naturally he must somehow acquire it before he can be a real high-school teacher. And this applies to other things besides the exact sciences and the classics. There is nowhere in any subject a more insistent requirement of exactness and accuracy than in manual training, mechanical drawing, and bookkeeping. It is, of course, unnecessary to add that the requirement of exactness involves no necessity of exasperation over the failure of boys and girls to measure rigidly up to the standard from the first. The high-school teacher who remembers the pit from which, perhaps, he himself was digged, may well be patient with those who cannot yet see the importance of accuracy and precision. After all, where the pupils are matters not so much as the direction in which they are moving.

"I believe in boys and girls, the men and women of a great tomorrow," so begins the School Teacher's Creed of Edwin Osgood Grover. You may call it platitude if you will, but the high-school teacher must write it upon the tablets of his heart. Someone remonstrated with Speaker Reed because he was not an admirer of Roosevelt. "Oh, you are mistaken," said Reed, "I am an admirer of Roosevelt. What I admire most about him is his enthusiasm over his discovery of the Ten Commandments." Even so, it needed Roosevelt to remind the American people that the Decalog is not obsolete. The world, including the high-school teacher, "needs not so much to be informed as to be reminded." The teacher needs, perhaps, to be reminded that these boys and girls of his, if they are not brought up so well as he was, as he is sometimes prone to think, and even tho some of them are his despair in his hours of depression, are yet the hope of the world. "With all their imperfections on their heads" they are better than their elders. In the moral realm, the high-school teacher needs to recall that whatever the present generation in the high school may prove to be, it is the past generation or two that has supplied America with the grafters, the embezzlers, the malefactors of great wealth. Those who tremble with apprehension that the high school of today is turning out untrained, inefficient citizens will do well to reflect that we need not inevitably do worse in education today than did the school teachers of a generation ago, whom many of us hold worthily in reverence. If the high-school teacher cannot find in his boys and girls today material, which in skillful hands gives encouragement for the future

of America in efficiency and integrity, let him resolve that he has mistaken his calling. It does not follow that there is not work for him to do in training these boys and girls for the greater responsibilities which they must assume; he needs but open his eyes to their weakness, their unpreparedness for what is before them, and with eyes open to these things, set himself to the task of training them into manhood and womanhood, which are theirs to attain if they are guided aright.

And this leads to the next fact, which the high-school teacher needs to recognize as vital. He cannot do all this training alone; he must have the co-operation of the home; and he can get it if he wants it. A father said to me a few weeks ago: "When I went to school, we used to think that the teacher was a sort of natural enemy, a legitimate mark for the pranks and meanness of the boys and girls. I'm glad that this idea is dying out and that my children are viewing the teachers as their friends." The teacher may not approve of the home training of his boys and girls. They may have too much freedom, be allowed too much social liberty, may not be held down to regular study hours, may not, indeed, have a quiet place at home to study. But a talk with the parents, or better still, an acquaintance with parents, which does not come as the result of a complaint about the boy's shortcomings in school, will reveal in practically every case, that the parents' ambition centers in their boys and girls. "All they aspired to be and were not," they want to see realized in their children. They may be taking a wrong course to realize it, but if so the wise teacher can do much to help them, and, thru friendly acquaintance with the homes, he will be sure to discover things that will help him in his own work with these children.

A boy was failing in his solid geometry and his teacher and I had about decided that the work was beyond him. The father, who is a foreman at the steel works, came to see me about it. I said to him: "Mr. Blank, I'm afraid that John can't do that work in solid geometry." "Do it!" exclaimed the father, who is a German, "of course he can do it—he's got to do it! Sometimes I haf a man at de Steel Vorks dat can't do vat I tell him. If he can't do it I show him." "*Parens Iratus*, His Cause and Cure," by William McAndrew, in the latest volume of the *School Review*, is good literature on this subject.

And finally, there must be in the high-school teacher himself a personality that inspires the boys and girls. "Logicians may reason about abstractions," says Macaulay, "but the great mass of men must have images." You can pick out in your own high-school training the teachers with a personality, and they are the ones who helped to shape your life. Cheerful, they were, if not always outside, certainly at heart, and like Goldsmith's schoolmaster

> if severe in aught,
> The love they bore to learning was at fault.

And you know that they believed in you—you can see it now and you somehow felt it then, even when you were dubious about yourselves. And somehow it almost inevitably happened, tho formal co-operation by parents' meetings was not the fashion when you went to school, that there was a subtle understanding between teacher and home, which resulted in a tacit co-operation. Perhaps you never fathomed it, but you felt it too palpably to question it more than once.

Of this personality perhaps no element is so essential as the missionary spirit—the spirit of service. You may have known teachers who permitted an overweening sense of their dignity, of their reputation, to weaken their work. Appreciation of the teacher's dignity, of his worth, like the kingdom of heaven, cometh not with observation, nor with nice calculation on the teacher's part. It is not appreciation of the high-school teacher himself that is important, but appreciation of the things he loves, the things he believes in, the things he respects. In self-abandonment in the work, in the service of the boys and girls, not sentimentally but solemnly, advisedly, in the fear of God, the high-school teacher shall find ample for dignity and even for glory. It was this sort of personality, which expressed itself in the morning prayer of Bulldog, the master in Ian Maclaren's *Young Barbarians:*

> Lord, keep the laddies before thee from cheating, lying, and cowardice—which are of the Devil. Be pleased to put common-sense in their heads and thy fear in their hearts, and give them to be honest men all the days of their lives.

"It was a purposeful prayer," commented Jock Howieson, one of the laddies grown to manhood. Then he added fervently, "An' he walkit up to his wards."

EXTRA-CLASSROOM ACTIVITIES IN HIGH SCHOOL: THEIR PLACE AND THEIR IMPORTANCE

RUFUS C. BENTLEY, ASSOCIATE PROFESSOR OF EDUCATION AND HIGH SCHOOL VISITOR, LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

It seems fair to limit my part in this discussion to a statement of the community's rights and the school's privilege: this chiefly in the smaller high school. This numerous, populous, and widespread non-urban type seems to furnish the most likely materials from which to construct the social platform of the American public high school. I beg to divide further the labor of discussion by confining myself to a comparison of the social status of the public high school, which has a local community as its constituency, with that of the college, which has no community in the same sense.

My remarks must hinge upon the meaning of community. What are the assurances of its adequacy as the organ of democracy? That it shows variety is one. That thru these varieties run certain threads of character-

istic is the ground of expectation that it will bear a common strain. Hard as has been the task, the political adequacy of community has been easy to work out, compared with the social and moral. Formal justice and equity but furnish a harness in which forbearance and mutual service must work. This strain is fairly on. The part the newer institutions of the community are to bear we have but begun to suspect.

It has been in a curriculum epoch, a period of formal accreditation—one the state was able to handle—that the high school has now secured full recognition. Like "Bill Smith," only ornamental at home, tho known as the "Honorable William Smith" at the state house, it still wants the credential of genuine service to the community to which it belongs. Its best credit lies before it. On the social side, neither the state, nor as yet the university, has much to offer it. The community is free to establish its own precedents. Whether it was necessary to sue for credit from without first is now perhaps an idle question. Anyhow the high school is beholden now to this community as both environment and motive of what it is to become. The university has been very self-confident in laying the substructural lines. All the help it can give now is a better training for the right sort of workmen on the finer architectural task of superstructure.

We are passing into new social protections from the isolating wilderness of pioneering days. We foresee an urban or suburban status for most communities. Whether this shall mean to hang mere settlements upon car lines, depends upon the crescent institutions. Some institutions hang in doubt. Some cast about for a new status. The home itself seems searching among them for supplements to its waning influences. Its rehabilitation may depend upon some compact it can strike up with the school. Perhaps the high school has come to the kingdom for such a time as this! If domicile declines to dormitory, if the hearth loses even the stability of the chafing dish, what shall rescue the integrity of the family that tumbles out of bed into the other institutions and the restaurants? It must be the institutions ready to render disinterested service to the cause of home re-integration. The hope of the high school for prime usefulness rests in its power to conceive a service function where the community needs help most.

Why don't young men crowd into our profession? Service, even martyrdom, is what they seek. Can't the school furnish it? They go into slum service; sanitary, settlement, playground, and every other type of public and private municipal social service. Young women, some who will have to enter the teaching ranks, cast about almost desperately for a chance to sacrifice themselves somewhere else than under the brand of "teacher." Sometime, of course, care for the interests of young, growing, *well* folks will be as attractive as the office of doctor or nurse, but how long must we wait? At least until the teacher's human office has the recognition long since granted to his scholastic function.

But open wide the door—what shall be the limit? One person foresees the advisory teacher being called upon "to darn the pupils' stockings!" The real teacher is not worried. He is not on his way to some other profession, seeking leisure here, with pay, in preparation for service later. Of course teaching will not be a real profession until it claims the maturest and best service of men and women. The community will have even that when it is willing to pay for it. The high school and its teachers will come to their own together. The pupil will swing away from his college exemplar, as the teacher swings away from his teacherisms. The teacher will desert his teacherisms when he is sworn to the service and ripens in it. He must be an expert specialist in character and humanity. The high school will have social leadership in its community when the teachers are willing. The teachers will be willing when the community has afforded itself a permanent staff. Shall the medical profession learn to train preventive advisers; the legal to exalt counsel above contentiousness; the ministerial develop a new pastorship, while the school makes no expansion of the service type of its teachers? As other professions outgrow their mystery, insincerity, devotion to theology, so we must look with them for a better day of prevention, counsel, and human service. The teacher's work ought to be the best understood of any profession that tries to serve the community. The community will understand and appreciate human service as it has never understood curriculum. Not a guild of mystery, but a brotherhood: the pupil will recognize it when it comes; the parent will respond with sympathy when convinced; and men and women will fill up the ranks.

Compare the high school and the college. The college student has the misfortune to be away from home; but he has passed an important choosing point. He is out of his community, presumably segregated for the purpose of studentship. The high-school pupil is not yet compelled to choose between studentship and a non-studious vocation. His school must conspire directly with his home in his education. His scholastic work is not only at an unripe stage, but it is only one of many elements in his unspecialized education. Some informal returns from advanced students have helped me. Those from city high schools seem to think that there was no connection between the ideals of their school and its community. Those from the country brought forth a harvest of items showing conscious sense of proprietorship, a community impulse ready to be directed. But the program bristles with question marks. Here is occasion for sagacity. What may our own temperament be depended upon to stand? What are the actual conditions in our community, the age, status, personnel of the other social institutions? What types of precedence have they which must be observed? What facilities to work the same ground? What is the natural center of co-operation in this community, the church, the lodge, the homes, or the high school? Then what may a given community be sure to furnish as a point of view?

Anywhere, the high-school teacher finds himself charged with the leadership of young persons in their last school days. The outside activities are the ones most likely to discover the best individual powers. Opportunity is the high school's best word. Opportunity for most lies somewhere else than in scholastic success. Every young person deserves and can have the encouragement of success. The high school must choose between being the persecutor of some and the purveyor of opportunity and success to all. Some won't stay to be persecuted.

The word "opportunity" is slighted; the word "required" is overworked as applied to the student's attitude toward school, tho much less so with the country pupil. What he lacks in socialization he more than makes up in seriousness. It is all privilege to him. He knows what time will buy. He helps to buy the leisure for high-school privilege. Added to the joy of teaching such a person is the joy of seeing his grateful appreciation of help toward the acquisition of any possible grace or social power.

Sharing in the control of activities lays the foundation for adult controls. Outside activities guarantee to pupils a share in the school's control. Share in control reduces one's need of control. It were well if we might lose the terms "pupil control" and "teacher control." Some of the best high schools have forgotten an old interest in their own government. The privilege of the law-abiding adult to be oblivious to the idea of government may well be the ideal of the adolescent's school.

The college tries to sophisticate the person whose home has slighted his social training; but with indifferent success, partly because the advisers are students. Even for these few who go to college, high-school teachers could be most salutary missionaries of this endeavor. The college teachers are prone to shirk this duty. This is a good place for the high school to turn the tables and teach this newly appreciated duty to its old exemplar. The function of advice is both more difficult and more interesting in the high school, because more liberal and less technical. High-school pupils are educational raw material to be tested and assorted. When this responsibility has been fully assumed, we shall have disposed of the old issue of "preparation," never settled in the old régime, because only attacked upon the scholastic side. Besides preparing students by discovering that they have the instincts, ambitions, abilities, poise, balance, health, temperament, and adaptability to warrant their pursuit of further protracted academic study, by the same processes will have been discovered the aptitudes for many non-student vocations.

The special teacher points an important difference. The high school cautiously gathers up into itself community activities first tried out by private enterprise. Then the special teacher becomes regular, standardized along with his function. A librarian secures a place. Such a person is available to supervise the neglected activity called studying. Or he may

become a social secretary, vocational, or other, adviser, or may serve as director of athletics. The important fact is that a person who seems to be free for new function, draws out a new host of offices all of which are of the social sort. There is the risk of relaxing the regular teacher's feeling of responsibility for the work taken over by the specialist, but our small schools are not so well manned as not to have enough human specialties to keep everybody but mummies alive. Something may be so assigned to every teacher as to re-emphasize an almost lost art, the art of knowing individual pupils' whole program of work. This is a qualification of the human, as opposed to the scholastic, teacher. The physical teacher is a good example, in the high school, of the teacher whose work forces a close connection with other members of the faculty as well as a full knowledge of program and regimen of individual pupils; while the college athletic director rather stands ready, than directs the students.

It is healthy for the high school that its function is being subjected to new interpretations, as studies are seen to be subject to many avenues of approach—most of them preferably "real," "practical," "occupational," or "vitalized," as the term may be. Closely connected always with all these practical avenues of approach are the social and recreational. Humanly, that is physiologically, speaking, in terms of sound hygienic balance, avocation is not so much the alternative, as the reverse side and inseparable counterpart of vocation. In no other part of our experience may the educational interplay be so easy as in the high-school life. A normal integration of all phases of life, made from all directions, is the fair requirement to be made of the community's high school, especially where it may be shown to be the chief social institution in the given community. Wherever any activities may be shown to be dissipative of growth energy instead of contributive to an integration on the individual's discovered center of gravity, they must be dispensed with or rescued. Secret organizations claim the school as their excuse for association, but repudiate its claims upon them, and thus serve as a typical example of activities in their nature dissipative rather than integrative.

Even play itself has suffered much from lack of the play spirit. The best feature of vocational pursuits is that in high school we can work at them in the play spirit. In high school the person is within that part of his life which is most significant for him, if not for the race. All activities here profit by the surplus energy. To try on the adult activities is the function of play. Making the decisions that come by way of doing, or trying to do, what one thinks oneself cut out for is the essential feature of this late play period. Is there any natural limit to such opportunity?

One of the lessons we slowly learned in the "curriculum epoch" we shall have to learn again in the new field in the present "social epoch" of the high school. We finally came to realize that the most significant fact educationally about children was their intellectual differences. It seems

likely that these are still greater socially between individuals, as they certainly are between communities.

Good home surroundings, in a less degree good school environment, is socially to a child what good context is to a learner. To secure good usage, you need nothing but exclusively good context, oral and written. I knew a man whose own use of language was ridiculously incorrect who regarded grammar as one of his strong points in teaching. He was strong on curriculum but weak on expression. We need a school which is, in its teaching personnel, an adequate context of verbal, modal, personal culture. With solid, cultivated teachers, alive to the privilege of being this context, constituting the very matrix of the embryo persons developing among them, what can hinder a human result worthy of the community and its high school?

SOCIAL FUNCTIONS

JOHN CALVIN HANNA, PRINCIPAL OF HIGH SCHOOL, OAK PARK, ILL.

The family is a natural group and can perform certain functions and control certain activities more effectively than any other group of which the world has made trial.

The only result thus far of the development of modern civilization that seems to touch this assumption is the result that certain functions are more or less successfully turned over *in part* to institutions owned and controlled by the community which is constituted of all the families in a given territory.

Intellectual training is one, and the most conspicuous one, of these. The public school is the institution thus developed. Physical training—in its ramifications—may come next, but this can be turned over only *in part* to the school. The same is true of moral training and of social training in the large sense of that term.

The ignorance, the indifference, the general incompetency of individual parents only make the problem more difficult.

The bringing of children into the world must remain with the family unless human nature is completely revolutionized and a sublimated Mormonism introduced.

It has been pretty well demonstrated that with all its deficiencies and all its blunders the public school serves the purpose better for the intellectual education of most children, at least in those fields that are turned over to the school, than any other known agency could serve it.

It is the belief of the writer that social training in the schools should be largely incidental and that nothing, not even the school, should be allowed to take away from the parents this privilege and responsibility. If for no other reason, this is true for the sake of the parents themselves. They alone must bring the children into the world. They alone must control at least a portion of the child's social education. If they are

deprived of too large a portion of this duty and this privilege they will become more and more unfitted for the performance even of the moiety that *must* be left to them.

The solution of this problem seems to lie in the intelligent and authoritative co-operation of the family and the school to bring about a healthful, happy result socially.

To this end there ought to be developed in the high school careful instruction within reasonable limitations to train the youth themselves for the responsibility that in so short a time will come upon them as parents, for the social training of the next generation.

It must be borne in mind that the increased turning over of intellectual training to the school, while it has certain apparent advantages as a result of handling children and youth in groups, has its most convincing justification in the smaller cost per capita as compared with the cost of private instruction.

This argument, while ordinarily the most appealing to the individual taxpayer, has its practical limitations. Money cost is counted at a low estimate of value when a question arises as to the preserving of rights and institutions such as freedom from the tyranny of priest or prince, or a better home life, or the inevitable competition that crowds in the world's work.

And therefore, unless and until the community or the family units of which it is composed is ready to surrender the freedom of choice in matters commonly called social, it is the family that will dominate. Only thru an intelligent and unselfish co-operation of family and high school can the complex problem be solved by joint influence and power.

The blundering and mainly unconscious harmful attempt to supply social training thru the development of secret societies in the high school has been brought about largely thru the natural hankering of the high-school boy and girl to ape the manners and institutions of the college young man and woman.

This aping of the manners of the college youth can be handled easily by the co-operation of parent and teacher so as to prevent serious results.

The aping of the institutions is a more serious matter because institutions tend to a certain semblance of permanence and of course the need for these substitutes for family that are for many college students made necessary by the artificial character of the institution which we call college, and by the almost total neglect of this real need on the part of college authorities—such a need absolutely does not exist in the local high school.

Here also, of course, the problem must be solved by the co-operation of parent and teacher, who may wisely invoke the aid of the state in the enactment of wisely framed legislation.

It is in accordance with analogy and apparently with sound biological

principles to believe that such development of social qualities must come about slowly and cautiously and without artificial opening of any buds.

Gradual recognition of the social problem that thrusts itself forward, albeit in disguise, in athletics and in all physical training, in the debates and parliamentary clatter that belong to the latter half of the period of 'teens, in the hankering for clubs and societies and their soft machinery and tinsel decoration—gradual recognition of this problem may, under the guidance of broad-minded and unselfish teachers, combining with unselfish and broad-minded parents, achieve immediate results more and more conspicuous and advantageous as years pass, and seemingly must, in a decade, begin to show a molding in the work of the next generation of adults.

Everywhere and at all times these results are possible only thru the development of the "spirit of the school," in the higher and nobler sense of that phrase. And here, as everywhere, comes in the power, the personality, the ideals, and intelligent unselfishness of the individual teachers.

Responsible officials more and more will have to look for the "blue flower" in choosing their new teachers, and this attitude, if persisted in, will slowly force the training schools—university or normal school—to give intelligent and loyal heed to the changing demand in the qualifications of the high-school teacher; for principal and parent will be more and more on the alert for the discovery of this quality that shall be available in the directing of extra-classroom activities considered as especially related to the physical, the social, and hence the moral, development intrusted to their care.

SCHOOL PUBLICATIONS, LITERARY AND MUSICAL ORGANIZATIONS, DRAMATICS

GILBERT N. BRINK, PRINCIPAL OF HIGH SCHOOL, BERKELEY, CAL.

The work of the high school is to prepare, or aid in preparing, its students for good citizenship. In developing those qualities which make good citizens I believe there is nothing more important than extra-classroom activities. The activities present to the mind of the pupil something concrete and are the practical channels thru which he comes in contact with the life of the community. Classroom work is often very inspiring, but it lacks the concrete application to everyday life which comes from wisely directed activities outside the classroom. Did you ever see a group of boys outside the classroom eagerly discussing the conjugation of a difficult Latin verb or a proposition in geometry? Perhaps; but you more likely saw them discussing the latest baseball scores or something which has just happened in the community—things which they see men doing. The things which a boy may discuss with his father and feel that

the latter is really interested in are not yesterday's German lesson or the geometry for tomorrow. If there is any ground of common interest to the two, it lies in extra-classroom activities.

I shall discuss briefly student publications and literary and debating societies from the standpoint of the small high school. How can these activities help prepare for good citizenship? A good citizen ought to be a man or woman who is trained to keep an eye on the administration of affairs in city, state, and nation; who is capable of weighing arguments and exercising sound judgment when it is necessary to choose between two courses; who can be trusted with the management of public affairs, and who has the ability and the willingness to assume, if necessary, this responsibility, and is not content to leave it to corrupt politicians. For outside activities to develop these qualities in students, it seems to me two things must be carefully observed: first, membership must be voluntary, and second, there must be a wise and careful supervision.

I have seen schools where membership in literary societies is obligatory. The idea, I suppose, is that it is a good thing and therefore the student must have it. I believe that anything like compulsory membership is detrimental to the best results. Voluntary membership gives a feeling of ownership and privilege which brings an active interest and pride in the achievements of the organization. I have found that small membership is a decided advantage, say twenty-five as the maximum. The second requisite cannot be too strongly emphasized. All idea of "student control" or "teacher control" must be carefully eliminated. Co-operation of students and the advisory teachers is the only way to secure adequate results. Of course the folly of unaided student management is quite apparent, just as the certain ruin of any enterprise which is dominated by a teacher. A teacher who possesses the proper tact and diplomacy can always direct the policy of any such organization without the fact being apparent to anyone but himself; on the other hand, by poor judgment he may easily wreck it. The debating society ought to be self-governing as much as possible, with the teacher as an advisory member who can come to their aid and give wise advice when he foresees danger.

The responsibility which rests on the president of such a society often develops unexpected qualities in a hitherto careless or lazy boy. I have in mind one such case—a boy whose persistent disregard for law and order was a great source of anxiety to the school and whose fines for disorderly conduct in his debating society kept him in continual poverty. When he was elected president of the society, the first couple of meetings were not very successful; he realized that the society was going to smash because he wasn't conducting it properly. He rose nobly to the occasion and never did a presiding officer have better-conducted meetings. His new-found ability to shoulder responsibility and handle a difficult situation made an entirely different boy out of him.

In these societies most boys naturally choose debating and public speaking as the line of work to pursue. Here the discussion of local issues is a means of bringing them into close touch with the life of their community. On one occasion, in a town of forty-five thousand people, the adoption of a commission form of government was being considered. This subject was chosen for the annual debate between two boys' debating societies in one of the high schools. The interest of the community in this debate was surprising. In the audience were a large number of attorneys and politicians anxious to hear what would be said on the subject. On another occasion the gas company was endeavoring to persuade the city council to adopt a system of gas lamps for street lighting. One of the boys' debating societies discussed this question and a representative of the gas company was present to see what use was being made of the statistics which the high-school boys had been getting from the company's office for the last two weeks. I presume the arguments of these lads did not appreciably affect the outcome of either issue but the debate did give the boys a live interest in the affairs of their community and a sense of their own ability to grapple with such problems when the time should come for them to do so. It also called the attention of the community to the high school as an institution of importance. I dare say several fathers were stimulated to inform themselves better on these local issues by the innumerable questions asked by their sons preparing for the debate. The board of education considered the work of such importance that separate rooms were fitted up for the special use of these societies.

I believe that boys and girls should have separate societies. The work of the girls would of course be along slightly different lines.

The publication of a high-school paper, while it gives opportunity to fewer students, is no less important. The editor finds that he or she must exercise careful judgment in the selection and use of material; that to put out a paper acceptable to a critical set of subscribers is a position of great responsibility, and that one must be "on the job" every minute if it is to be a success. The business manager gets very valuable training in getting advertisements, in bargaining with printers, and getting his assistants to do part of the work.

Of course the supervision of these enterprises must be wise or they lose their value and are likely to be harmful. This emphasizes the need of efficient, true, noble men and women in high-school work.

In conclusion, I believe that literary and debating societies, student publications, or any other outside activity may be made a source of great good in developing the proper kind of citizens.

REPORT OF THE COMMITTEE ON COSMOPOLITAN HIGH-SCHOOL CURRICULUM

SPENCER R. SMITH, PRINCIPAL, WENDELL PHILLIPS HIGH SCHOOL, CHICAGO, ILL.

The Committee on the Cosmopolitan High-School Curriculum begs to make the following report:

It has been preparing material for the questionnaire suggested in the preliminary report. It finds that to print the questionnaire—to mail to the high schools of the United States—to pay for the services of a statistician to make collection of data to be received—will take more money than the members of the committee feel warranted in paying out of their own pockets. It therefore has asked the proper committee to make an appropriation for its work and hopes that it has been successful in its request.

The committee at this time wishes to emphasize one phase of its study that it has failed to emphasize heretofore; viz., the content of individual studies. Not only must the new curriculum suggest the proper studies and their correlation dependent on the demands of the constituency of the schools, but the content of the individual subject must be made a matter of study; for example, in chemistry and biology, to know the experiences and needs of daily life is of as much value as, if not of greater value than, the teaching of scientific theory therefrom.

Herein this committee wishes the co-operation of such other bodies as are interested in problems that arise in the consideration of the preparation of our young people in that efficient citizenship that is the aim of the education of today. While the committee has not asked for sufficient money to warrant such conferences with other committees from organizations equally interested in the topics of investigation, it hopes thru its different members to come into conference with leaders of these different organizations or movements and to receive their aid in the formulation of basic principles for the development of a cosmopolitan high-school curriculum, its constituent studies, and the content of each study recommended as a component part of such curriculum.

Your committee again asks for the hearty co-operation of the high-school principals of the country in the attempt to reach some conclusions that may be basic in their character.

Respectfully submitted,

For the committee,

SPENCER R. SMITH, *Chairman*

ROUND TABLE CONFERENCES

A. ENGLISH

THE QUESTIONS AT ISSUE

Preliminary Report of a Committee on College-Entrance Requirements in English

JAMES FLEMING HOSIC, HEAD OF THE DEPARTMENT OF ENGLISH IN THE CHICAGO TEACHERS COLLEGE, CHICAGO, ILL.

At the Boston meeting last year, the English Round Table authorized the appointment of a committee on College-Entrance Requirements in English. The action was distinctly in the nature of a protest. The committee was instructed to tell the College-Entrance Examination Board what the high-school teachers of English want. This task may have appeared to the militant creators of the committee easy, if not grateful, but it did not appear so to the members of the committee themselves. For who knows precisely what the high-school teachers of English do want? Freedom from "college domination," certainly, but beyond that a positive, constructive program in harmony with the newer conceptions of education and successfully carried out by means of intelligent co-operation. Hence the committee decided that it must first of all ascertain what the teachers of English in the high school really do want and why they want it. The committee has set to work, therefore, to secure a consensus of opinion on the principal questions at issue and hopes to perform a valuable service in uniting the English teachers themselves in support of sound principles of secondary English. The high-school course as a whole is now passing thru a period of rapid and somewhat radical adjustment, and it is hoped that the work of our committee may be of value in this process of reconstruction.

It was decided to organize a main committee to be composed of members from the various sections of the country, each of whom should seek to secure co-operating committees in the associations of English teachers in his territory. In fact, a large number of such committees have been appointed and are actively at work. A bulletin was prepared [see below] stating the purpose and plan of the committee and outlining the questions upon which a consensus is desired. It is intended that each co-operating committee shall direct the discussion of these questions at a meeting of the local association, and after due consideration shall formulate a reply. These replies will provide the principal material for the final report of the main committee, which will be presented to the College-Entrance Examination Board before the next meeting of the Conference on Uniform Entrance Requirements in English, and which will also be printed for general distribution. Copies of the bulletin have been sent to most of the educational journals of the country with request for publication. The bulletin has also been placed in the hands of many school officers and educational leaders, including school patrons. Some of the more active associations of parents will formulate replies. It has been suggested that we seek the opinions of the graduates of the schools themselves. This would certainly be desirable, but it would require more time and expense than we can command.

The questions which are included in the bulletin above referred to were phrased after much conference and much careful reading of recent educational literature. Representatives of both school and college have been very outspoken of late, and they have set forth their views on the questions which are now before us with definiteness and vigor. Many high-school principals and teachers declare that the influence of the entrance requirements in English is bad. They say that the legitimate aims and work of the high school are interfered with and that some method of entrance to college must be devised which will not only not hinder but positively help the high school in per-

forming its task. Let us briefly review the controversy and attempt to define the issues more exactly.

THE PROBLEM: WHAT IT IS AND HOW IT GREW

The problem of the articulation of the high school with the college is a natural result of our educational development. It has arisen from the overlapping of the older system of endowed colleges, with their self-developed preparatory schools, and the newer system of public high schools and universities organized and supported by the state. The academy was originally and is today a preparatory school. The public high school, on the other hand, was intended to provide an increased opportunity of education for the children of the people. With the development of the state universities, it has come to be thought of as the necessary stepping-stone from the elementary school to the college of liberal arts, the college of science, or the professional and technical school. There has been a marked tendency on the part of the university to regard the public high school as mainly preparatory to itself, and the university is inclined to make excessive demands upon the high school. If the relations between high school and university have been to a degree satisfactory it is mainly because both have felt the pressure of public sentiment and have sought to adjust themselves to the demands made upon them by a democratic community. Since both are chiefly concerned in preparing citizens for effective service, the university can rightly ask only that the high school do well what it feels obliged to undertake. As a matter of fact, the state universities do at present accept for entrance credit practically all the courses which the high schools give.

It should be noted, also, that the state universities some years ago substituted a system of inspection and accrediting of schools for the older system of entrance examinations. By this plan, graduates of high schools of standard grade are admitted to the universities on a certificate signed by the principal. This arrangement has been generally accepted by the endowed colleges and universities, especially in the middle and western states, and seems to give much satisfaction. It has not, however, escaped criticism. We hear of "domination" of high schools even by these higher institutions accepting certificates, and it is charged in some quarters that the system prevents the establishing of a high standard of scholarship in the colleges and universities. It has, at all events, brought about such cordial relations between the higher schools and the secondary schools that sympathetic co-operation in working out common problems is now general, and the necessity for freedom on the part of the high school to adjust itself to new demands seems to be clearly recognized.

Meanwhile, many of the children of the people have been making use of the public high school as their place of preparation for our older endowed colleges and universities, and "thereby hangs a tale." For these colleges were organized to give a certain kind of education, and they still regard themselves as having functions distinctly different from those of the colleges supported by the state. They have been exceedingly conservative in maintaining the traditional view as to what constitutes a higher or liberal education and have felt justified in demanding that any person desiring to take their courses shall have prepared himself in a particular way, so that he may exactly fit into their scheme and continue his studies with a proper appreciation of them. True, most of these institutions have an elective system, but, nevertheless, the undergraduate work is so planned as practically to determine what the student's preparatory course must be. Now since it is both undesirable and impracticable to give in the high school two sets of courses, one for those who wish to go to college and one for those who do not, it comes about that the presence of a few pupils preparing for college (usually less than 5 per cent) largely determines what course all shall pursue. Indeed, the effect is often so marked as to transform the last year into a year of review and preparation for examination, frequently the particular examinations set by certain colleges differing widely among themselves. For the high-school teacher, a graduate of one of these colleges,

takes a natural pride in the number of his pupils who pass entrance examinations creditably and he gets into the habit of measuring his success as a teacher by this standard. In this way, as many think, the high school is turned aside from its legitimate uses.

It is clear that the whole question of the articulation of school and college has grown up naturally and is not merely a result of perversity or desire of domination on the part of anybody. College graduates tend inevitably to overemphasize preparation for college, and to employ college methods of work, and this tendency will continue to manifest itself until such time as adequate professional training is demanded of those who seek to become high-school teachers. That time seems now to be near at hand. As for the College-Entrance Examination Board, it was established as a convenience to the colleges and to students seeking to enter them, not to dictate courses of study or methods of teaching. Indeed, the board has declared itself both unable and unwilling to say what the high schools shall do or how they shall do it. Its object is merely to establish uniform entrance requirements and an adequate test, so that good students may easily find the way to college. But, as has already been indicated, the presence in each high school of a few pupils who wish to pass these uniform tests has the effect of shaping the courses for all the pupils. It is only fair to say that, in the case of English, at least, the influence of the uniform requirements has certainly not been wholly bad. Nevertheless, the results obtained do not satisfy the colleges, and the restrictions imposed are irksome to the high schools. With changing conceptions of popular education and varying demands of local communities, a clash between radical and conservative, between high school and college, was inevitable.

The problem of articulation is complicated by the fact that many colleges which admit by examination do not utilize the College-Entrance Examination Board, but set up special requirements. The women's colleges of the East are especially prone to do this. Some states, moreover, have very definite systems of high-school supervision and prescribe courses and set examinations for the high-school diploma. In many cases pupils about to leave high school have their minds centered upon the coming examinations. The inevitable tendency of such a situation is to transform a high school into a cram school. Teachers do not teach, they prepare for examination. Pupils do not study to learn but to pass tests. Such a condition is intolerable. It is opposed to good sense and constitutes a breach of faith with the public which supports the schools. The individual school is robbed of its freedom, the teacher of initiative, and the pupils of true educational influence. It is this sort of thing against which high-school men are lifting up their voices; it is this condition which must be remedied.

HOW SHALL THE PROBLEM BE SOLVED?

Various solutions of the problem are urged. Many think the difficulty would be removed if the colleges would examine schools instead of pupils. This is the certificate plan, introduced by the University of Michigan in 1871. It seems to work well in the central and western states and has a host of advocates. The essence of this plan is supervision of the high schools by the state universities. A standard high-school course is arranged, specific requirements in the various subjects are made out, definite units of credit are assigned, the various high schools are rated or, as it is called, accredited, and an inspector is appointed to visit the high schools from time to time and ascertain whether the equipment, course of study, and teaching staff are adequate and actually turning out good work. The inspector offers advice and encouragement, points out weak spots, and, in general, assists the schools in standardizing themselves.

As has been indicated, the inspector usually represents a particular university, and there is always the possibility that the function of the local high school as an advanced common school shall be subordinated in the mind of the inspector to its function of preparing students for his own institution. It is charged, indeed, that, in some states, the inspector or "visitor" regards himself as an advertising agent and devotes his

strength mainly to urging high-school pupils to attend his university, and that, familiar with college methods and perhaps not too well acquainted with boys and girls, he is too much inclined to praise methods not really well adapted to the young and better articulated with the work of his colleagues than with the business and social activities which will follow graduation from the high school. Not all boys and girls, moreover, can be made efficient even by the best high school, and consequently the colleges which accept students on certificate must and do receive many who are ill-prepared for any sort of college work. The result would seem inevitably to be a lowering of the tone of the colleges and a depreciation in its standards. At any rate, the point is urged with some warmth by the colleges which cling to the entrance examination.

The fact is that we have many colleges supported by private means which were never intended to educate the children of all the people. They were founded more or less in accordance with the English ideal, and their aims have been intellectual culture and preparation for the speaking and reading professions. These colleges say that they have a right to choose what sort of education they will offer and, therefore, what sort of preparation for their work they will demand. Two prominent eastern colleges have very recently reaffirmed this position; namely, Amherst and Harvard, and a short time ago an editorial in the *Nation* urged the eastern colleges, in the strongest terms, to devote themselves to producing an aristocracy of culture, and in accordance with this ideal, to continue the entrance examinations which have proved so effective in excluding all but the brightest and ablest boys. We want, say these colleges, only the pick of the high-school graduates, and we do not regard the newer high-school subjects, commercial and vocational work particularly, as well fitted to develop intellectual culture; and, therefore, we wish those who come to us to have studied mainly languages, mathematics, science, and history. Their position is, of course, the traditional one and the burden of proof lies on the advocates of the new.

So long as the older colleges got all the students they wanted, they felt their position to be very secure, but with the rise of state-supported colleges has come a competition that must be met. The older institutions find themselves at the parting of the ways. They must either be small and select or they must articulate freely with the high schools. Some are content to be small and select; others are willing to reform. Harvard has recently arranged a new system of entrance. The pupil must have completed a four years' high-school course, consisting mainly of languages, mathematics, science, and history. He will present an explicit statement from his high school as to what work he has done and as to his qualifications as a student. Harvard will examine him in four of the subjects of the standard course, one of which must be English. The examiner will write an estimate of the candidate on his examination book. With these statements from his school and from the examiners before them, the committee on admission will either accept the candidate or reject him; there will be no admission with conditions. No provision is made for inspecting high schools or forming an accredited list, as is done by the state universities.

It is worthy of note that, in taking this step, Harvard was influenced in part by the fact that the record of the students in the college was found to be at great variance with the standing obtained in the entrance examinations. Students with conditions often did extremely well in college courses, while students who obtained good grades upon entering, proved very poor later. Moreover, it was learned that many who would have been glad to go to Harvard were prevented by the rigid requirements for entrance and hence offered themselves to colleges offering greater freedom in preparation.

This action at Harvard, and particularly the reasons for it, are of the highest interest. The decision is thoroly consistent, for, in common with other universities, Harvard has long been accepting on their records students from other colleges for her graduate school, and it can hardly be urged that the average of work done in American colleges is better than that in the American high schools. "By their fruits ye shall know them."

Poor colleges and poor high schools will very quickly be known by the character of work done in higher schools by the students they send out. It seems bad policy to impose needless restraints upon the great majority of high schools because here and there we find one that is not good, and those who have either studied or taught in both the older eastern colleges and in those which accept students on certificate are unanimous, so far as we know, in denying that the examination system secures the best students.

AFTER FREEDOM—WHAT?

The University of Chicago has just announced a still more liberal plan of entrance and beyond doubt others will follow. In view of these advance steps on the part of the greatest of the endowed universities, it requires no prophet to foretell the passing of uniform entrance requirements in English and the coming of entire freedom to the high schools to work out their own destiny. Liberty is at hand, what shall we do with it? The mere removal of the incubus of the entrance requirements will certainly not solve all the problems of high-school English. Was it not mainly the uncertainties and vagaries of the high schools themselves which made an attempt at uniform requirements necessary? And have not the colleges justly complained that an appeal to the high schools for help in framing their requirements raised such a discord of voices that the colleges were obliged to decide for themselves what was best to do? In fact, do we not owe it to the colleges that we have a high-school course in English at all? The high schools do not even yet know their own minds in this matter. Only here and there do you find a high school in which a thoroly practical, consistent, progressive course in English is carried out with an eye single to the individual and social life of the boys and girls. There is altogether too much consciousness of the college lecture-room, past and future, altogether too much highflown criticism, pedantic reference-hunting, and attempt at literary composition. Our exercises have been too isolated, too motiveless, and too formal. We have failed to teach the simple, correct English, particularly the spoken English, of everyday life.

It is to be hoped that when the work of the committee is complete and the experience of the various sections of the country is brought together and made available for all of us, that there will appear some definite lines of progress upon which we may move out. Nothing can be of more importance to our pupils than that they secure a perfect mastery of the mother-tongue, and the task of discovering how to give it to them is our task, the task of the English teachers of America.

To Principals of High Schools and Teachers of English in High Schools:

At the meeting of the English Round Table of the National Education Association, in Boston, July 1, 1910, it was decided to appoint a committee to lay before the College-Entrance Examination Board the views of the high-school principals and teachers of the country in regard to the present entrance requirements in English and the examinations set upon them. The members of that committee so far appointed are: Charles Swain Thomas, head of the Department of English in the Newton (Mass.) High School; Benjamin A. Heydrick, head of the Department of English in the High School of Commerce in New York City; Henry B. Dewey, state superintendent of schools, Olympia, Wash.; Edwin L. Miller, assistant principal of the Central High School, Detroit, Mich.; Mrs. Henry Hulst, head of the Department of English in the Grand Rapids (Mich.) High School; Reuben Post Halleck, principal of the Male High School, Louisville, Ky.; Miss Fannie W. McLean, head of the Department of English in the Berkeley (Cal.) High School; and James Fleming Hosic, head of the Department of English in the Chicago Teachers College.

The purpose of the committee is to learn from those best qualified to say, whether the present system of entrance requirements and examinations in English fosters the best sort of English work in the high school, and what changes, if any, should be urged

upon the College-Entrance Examination Board thru its sub-committee on English and its board of review. The supreme consideration is to unite the teachers of the country in support of sound principles of secondary education, in order that boys and girls passing thru high school may receive the kind of training in English best fitted to develop them and to prepare them for life.

To accomplish this purpose, it is necessary to enlist the sympathetic interest of supervisors, parents, and college examiners and instructors, as well as that of high-school teachers. It is proposed, therefore, that every association of teachers or parents in the country, likely to be able to assist in reaching a consensus and decision on the questions at issue, be asked to appoint a co-operating committee, to gather evidence, direct discussion, and report conclusions to the Committee of the Round Table, which shall compile and edit a final report. This central committee will report progress at the next annual meeting of the National Education Association, and hopes to complete the work within the following year.

The central committee, in order to get this work under way in a definite fashion, makes the following suggestions.

To Co-operating Committees:

Each co-operating committee should secure, as soon as possible, the judgment of its constituency upon the main question: Do the college-entrance requirements in English, as at present administered, foster the best kind of English work in the high schools? If not, what changes should be made? The results of correspondence, discussion, and conference should be formulated and placed in the hands of the central committee, together with a digest of the evidence upon which each conclusion is based.

The following questions, particularly those under 1, 2, and 3, should be carefully considered:

1. *The influence of the uniform college-entrance requirements in English upon the high school.*—

a) What is the influence of these requirements upon the high-school course in English? In what field is the influence most felt?

b) What is the influence of these requirements upon methods of teaching English in the high school?

c) What is the influence of these requirements upon the pupil's attitude toward his English work?

d) What changes, if any, would you make (1) in the high-school course in English, and (2) in methods of teaching English in the high school, if the problem of preparation for college were eliminated?

e) Do you offer the same courses to your college and your non-college group? Why or why not?

f) Are certain high schools affected in special ways by the entrance requirements or examinations of particular colleges? If so, specify.

2. *The high-school course in English.*—

a) Is the followng statement of the aims of the high-school course in English satisfactory? If not, how should it be modified?

"The aim of the high-school course in grammar and composition is to develop the power of the pupil to express the ideas that come to him from the whole range of his experience. The aim of the high-school course in literature is to develop in the pupil (1) a liking for good reading and (2) the power to understand and appreciate it."

b) What principles should be followed (1) in the selection of reading for the high-school course in literature and (2) in distributing the reading thruout the course? Should the list be (1) prescribed, (2) advisory, or (3) open? Do the Uniform Requirements include too many books? too few? sufficient variety of type? Should the

distinction between *reading* and *study* be dropped? What provision should be made for the study of the history of literature?

3. *Entrance to college.*—

a) Would the following specifications provide a suitable test of efficiency in English upon graduation from high school and entrance to college?

1) A test of the pupil's power of written expression by one or more compositions on subjects suggested by the personal experience or the general information of the candidate.

2) A test of the range and quality of the reading of the pupil and of his power of literary appreciation by means of:

(*a*) The answering of a number of simple, suggestive questions on standard texts not previously prescribed.

(*b*) The explanation of two out of three or four passages of prose or poetry of ordinary difficulty, selected from books not previously prescribed.

3) A test of the candidate's power of oral expression by reading aloud and by conversing.

b) Should a high-school diploma be given to a pupil whose deficiencies in English are such as to prevent his being recommended for admission to college?

c) Which is preferable, certification or uniform examinations for entrance to college? Why? Is there a third method, better than either?

d) How should the National Conference on College-Entrance Requirements and Examinations be constituted?

4) What books or articles may be cited as expressing sound views (*a*) of the present situation with regard to high-school English? (*b*) of the high-school course in English and of methods of teaching English in the high school? (Give full library reference in each case.)

5) What additional matter or matters do you wish to have laid before the various co-operating committees thruout the country? (Please answer this question very soon.)

NOTE.—To be available, reports and suggestions from co-operating committees must be in the hands of the central committee not later than January 10, 1912. Correspond with the member nearest you (see addresses above).

JAMES FLEMING HOSIC
Chairman of the Committee of the Round Table

CHICAGO TEACHERS COLLEGE
April 25, 1911

ORGANIZATION OF THE COURSE IN LITERATURE IN SECONDARY SCHOOLS PARTICULARLY WITH A REGARD TO HISTORY

CORNELIA STEKETEE HULST, HEAD OF THE ENGLISH DEPARTMENT, CENTRAL HIGH SCHOOL, GRAND RAPIDS, MICH.

Now that the eastern universities are abandoning the system of examining on certain masterpieces, by which they had practically dictated to their preparatory schools what should constitute the course of reading, and now that they are following the universities of the Middle West in leaving the preparatory schools free to read what they will, when they will, and as they will, the movement will doubtless extend thruout the length and breadth of the land, and teachers of literature will have an opportunity to do their best in their teaching. As a sequel we shall soon be called upon to justify our freedom by improvement in the output from our schools. It behooves us, therefore, to consider betimes and to arrange our course to secure by proper economies and improved methods (1) better habits of work, (2) keener appreciation, and (3) consequent power of a superior order. We shall find, as do other business concerns when they reorganize, that by a little ingenuity and care we can conserve much that we are now wasting, and reap a rich percentage in by-products.

The Committee of Ten has advised us to organize our work, and thanks to the committee's labors for years past, we have never been in so favorable a state to attempt organization. First, we are accustomed to studying the masterpieces themselves instead of snatches from them and books about them, and we do not deaden the interest by too much biography and history, but enliven it by enough; second, we have a flexible list, offering more for the most fortunate and efficient schools, and requiring not too much from the least; third, we have on that list a goodly proportion of pieces that we shall want to keep, tho it needs revision to displace the less worthy pieces by selections that give literary types not now represented and that strengthen spots notably weak in our course. It is to be hoped that the committee will continue its labors, especially if it is ready to adopt its own good advice, and will help to organize our course. It is to be hoped that a committee whose word carries weight will serve as an advisory board if this present committee, as constituted, does not continue to serve. The old distinction that this committee has made as to *reading* and *study* may well be dropped, for the "reading" should be done with creditable care, and sometimes with minuteness, but the term "study," as it is used here in contradistinction, is certain to continue the abuse of a deadening learning-for-its-own-sake. What need not be a vice in a professional scholar, and may be encouraged in the few members of the class to whom it is natural, is disastrous when imposed on all in the study of literature.

One of the weak spots that we suggest the committee strengthen is in recommending home reading. It is very desirable that habits of individual reading be fostered, and to this end it would be well to stimulate, and in some fashion control the reading list. We wish to develop a habit of independent reading, not of required books (for all pupils of one grade have not the same likings or the same degree of proficiency in reading, and on these books little help will be given by discussions in class), but of a generous list of selections from what the children, or children of previous classes, have liked, along with other books that the teacher suggests. The privilege of substituting books that they have found worthy may well be accorded individuals. In my own twelfth-grade classes the books that were reported range from Plato and *The History of Napoleon* down to Oliver Optic and Henty. If time is taken occasionally for each pupil to tell the class what he has read lately that he liked, the personal recommendation will do much to stimulate reading and raise the quality of books read by the class, as well as to humanize the class and secure a true social culture.

The purpose of our course, in literature as in composition, should be immediately practical, to teach a pupil to express the ideas that come to him from the whole range of his experience. To that end it should aim to include all of the best types in prose and poetry—epic, lyric, drama, narration, essay, oration—and these should be studied for their structural beauty as well as for their thought, or content. The best methods of narration, description, exposition, and argumentation should be noted as they occur in the masterpieces studied, and this study should be supplemented by exercises in composition aiming to give more knowledge, and practice in its use. A good textbook, if it is not abused, will add to the efficiency of this work. Until pupils have felt the beauty of the form in the best and most original types of literature, they will lack the best preparation to give fit form to their own ideas when occasion comes to express themselves. It is because this formal side of literature is so practically valuable, so essential in the teaching of composition, and because this side of the literature will be so much more carefully considered when composition is taught together with literature, that I should consider it a great mistake to separate high-school courses in composition and literature.

The less immediately practical purpose of the study of the content of literature is not the less valuable to the life of the student, for the body is more than raiment. By his reading he comes to appreciate and use a noble art; but also, traveling in the realms of gold under the sway of those kingly spirits, he widens his horizon and learns the distant and the past, whence he can return to understand and cherish the better all that is

good in his present. If he reads aright, his spirit is roused from its passive state, and he enters into the life of his book for or against, as judge of its good and its evil. It will be observed that I am following Plato in considering the *goodness* of the pieces selected as their most important quality, tho *beauty* is the quality to be sought most in the study of their form. Plato held that the purpose of telling children stories was to make them "heroes" for the state; we are teaching our young people by the moral and religious questions that they encounter in the best literature, to consider their duty as citizens in the Kingdom of God. How can *Macbeth* and *The Idylls of the King* be read without opening the eyes of the spirit to moral and religious truths? Plato was doubtless too good an artist to want to preach stories, which usually hold their moral in solution; but he was an educational artist in selecting for his course the stories that had the right morals, "models of virtuous thought, picturing God as good, and heroes as good men." To multiply the strength of the impression, stories should be told also of men who break the moral law and are broken by it in turn; and modern children should have stories from the literature of the past, old pagan stories, like the *Odyssey*, to see what was beautiful and good in those times, but also what was not good as compared with the modern, and, following these, mediæval ballads, romances, and tales, the best and the worst in chivalry as judged in the light of our ideals. Until they have read some of the literature of the past, they cannot appreciate the present justly, with its fruits of the struggle from pagan to Christian, from mediæval to modern.

A lack of the sense of the past is one of the weak spots in American education, as compared with European, and this we should aim to strengthen if possible when we displace the less worthy pieces of literature from our list. It is said that more than other nations we turn our faces to the future, and it is full of hope that we should do so; but the past of every nation that composes our American race has riches of wisdom and beauty that should not be lost simply because the ancestors crossed an ocean. Far from having no legends and traditions, Americans have the right by direct descent to all that Europe has produced of heroic legend and tradition back to the dawn of time, and we should make certain that the children are not deprived of their heritage. In our continent of literature there should be no boundaries, and it would be folly to limit ourselves to the literature of any one European nation, particularly to take inferior pieces from that one, while we omit the best from the others. To be perfectly definite on this point, it would be well to change the title of our course to "Literature and Composition" instead of "English" which is a misleading term. Has the time not come for us now to adopt consciously for our policy the selection of the best from all of the sources, so approving and continuing the wise tendency that Ticknor and Longfellow introduced at Harvard, and so securing among ourselves the most valuable knowledge, the finest literary sense, and the widest sympathies with all of the sister nations whose sons and daughters we are?

If we displace from our list the pieces that are second-best, we can add within a few years in their place more of myth and mediæval legend, (1) a piece of biography by Plutarch; (2) a translation of a Greek drama; (3) a northern Saga, as "King Olaf," from Longfellow or from the *Heimskringla;* (4) an animal epic, as *Reynard the Fox;* (5) some legends of the saints, as St. George and the Dragon; (6) incidents of the crusaders at Jerusalem and Charlemagne's peers in Spain; (7) examples of the extravagant in chivalry, that show its decay, as *The Seven Champions of Christendom;* and *Don Quixote,* which laughed decrepit chivalry out. By making the right selections we can give our pupils the source material on which to base their comparisons of the life and ideals in the different ages, and we can rouse a real and vital interest as compared with the interest that is given when they are asked to read books to be able to take an examination on them, to be intelligent on them, or even to enjoy their beauty.

Given a list of the best books suited to high-school pupils, chosen from ancient, mediæval, and modern times and including all of the best types developed—epic, lyric, drama, essay, narrative—it is clear that we shall not secure the best results by running

thru our assortment in a haphazard fashion, or even by shifting empirically from place to place. By a haphazard order we can obtain at best a conglomerate, lacking in coherence and proportion, and lacking in the interest and effectiveness which we wish to secure for each piece. We can secure greater interest in the "Bunker Hill Oration," and greater effectiveness, if we do not read it just after the *Odyssey*, but after some piece that has a bond of connection with it. The necromancers and spirits of the *Faerie Queene* will be comprehended best by preceding them and following them with the witches who tempted Macbeth, and by other stories of fairies, goblins, and ghosts that terrified the men of that time. These reinforce each other, and after enough of them have been read, the character of the period to which they belong will be clear and a strong historical background will have been formed for the reading of any mediæval literature that will be encountered later. This will give all of the knowledge of mediæval times that some of the pupils acquire, for all do not take mediæval history. We can then arrange the order of the masterpieces so that they are of interest individually, but of greater interest and value as parts of a larger whole; so that they are apprehended in relation with other pieces of their time and school, but also, along with their school, in contrast to those that preceded and followed. When a pupil is taking a course he should not merely be wandering about in it, but he should know, if possible from the beginning, its aim and the final state that he is to attain. He should feel that he is making progress. When he has finished he should be able to look back over it with a sense not merely of certain authors who expressed certain ideas in certain form, but with a sense of differences in spirit, ideas, and form between the ancient, the mediæval, and the modern; with a habit of looking for new forms as they appear; and even with an inkling that there is a logic in their evolution from the less to the more complex. Is it too much to try to teach him in literature as he is being taught in history, that thru the ages an increasing purpose runs? If all of this can be done without increasing the work at present required, by merely organizing his reading course and asking questions and making comments by the way, is it not well worth the doing? Without this higher knowledge and this habit of comparison and relating all to life, our pupil will have on hand at the end of his course some assets (he can't help having some), but he will have also much that remains to him as dead learning—and a vice. He will probably have disliked his work, and will hold a lifelong grudge against the innocent masterpieces that he had to read in school. The pity of it!

From what I have said it is evident that I stand for a logical and historical teaching of the masterpieces, primarily to secure the best condition for their study, the best understanding and appreciation of their spirit, development, and form. A piece of literature is fashioned of the very blood and bone of its time and cannot be understood apart from the body to which it belonged.

The next principle to observe in organization is that the periods and schools should be approached consecutively in point of time. The more effective approach to the spirits, fairies, goblins, ghosts, witches, and devils of the *Faerie Queene* and *Macbeth* is not from modern times, but from pagan times, when Athene dashed down the heights of Olympus and Hermes passed swift as a thought, when Circe transformed men into beasts, and Odysseus descended alive into Hades. If mediæval literature is approached from modern, it will probably be misapprehended, and because we have come to smile at superstitions pupils will take them as lacking in reality, as allied to a light and playful fancy. It will be more difficult to realize how Shakespeare's audience, who believed in witches and apparitions, looked upon the witches and apparitions in *Macbeth*.

An additional, and a very practical reason for filling the first years of the high school course with folk-tales, myths, and mediæval lore is psychological—that our student in those years is in his early adolescence, when his nature craves the distant and the heroic, but not in the old childish way. If he has been fortunate, his reading books in the grades have supplied him abundantly with fairy tales and myths; it will now be a revelation

to him to review them, and to view them in the light of literary qualities, and of historical, moral, and religious values. He will find that "Little Red Riding Hood" is a gem of narration and description—vivid, dramatic, condensed, simple, excellent in construction, ingenious in device; and he can learn many of his rhetorical terms in a discussion of its beauties. Excellent subjects for exercises in oral composition are selected fairy tales and myths, one presented by each member of the class, and these so planned that they will give, together, ideas of the history and relation of some of the most famous pieces. The English version of "Cinderella" in contrast with the German version presents fundamental agreement, but interesting variations; "Beauty and the Beast" and "Cupid and Psyche" show unexpected relations between fairy tale and myth; "The Sleeping Beauty" and "Siegfried Awakening Brunhild" reveal a like relation between fairy tale and tradition of demi-god and hero; "Perseus and Andromeda" and "St. George and the Dragon" show a growth from pagan myth into Christian allegory, and will prepare the way for the Red Cross Knight of the *Faerie Queene.*

In the first year's work in the high school, mythology can be, perhaps, best taught incidentally while the *Odyssey* is read, and, if there is time enough, myths of the Northern Cycle and *Hiawatha,* all with a view to their religion and morals as well as to their epic form and spirit. If, like Schleimann, the pupil has been fortunate enough to read a children's version of the tale of Troy divine when he was eight years old, believing that there was a Troy, he will return to it with greater interest when he is thirteen, to dig out the sacred citadel and the tomb of Agamemnon with the archaeologist and to penetrate more deeply into the life pictured in the great story. A good exercise is for each pupil to undertake a piece of historical research in a small way, accumulating materials as he reads, with a view to presenting them in an essay toward the end, one keeping a list and description of the parts of the palaces, another of all of the furniture mentioned, another of games, another of armor and weapons, others of gods and devotions, all contributing a section to a chapter of history. The *Odyssey* should be discussed as the Bible of the Greeks with a view to its moral and religious teachings, for unfortunately myths are told in the classical dictionaries with no attempt to reveal the mystic meanings in their depths. Without interpretation, and as mere stories, they and the *Odyssey* come under condemnation in Plato's category of "just casual tales . . . . with moral ideas the very opposite of those which are to be held by the children when they are grown up." Not only are unassimilated myths dangerous in this way that Plato pointed out, but without their moral and religious significance they are positively misleading and untrue, for the religious meaning predominated in them and they were believed in to the extent that a man was condemned to the hemlock who discredited them. We should not waste the time and muddle the minds of the children on uninterpreted myths, but teach them (1) as what the Greeks believed and (2) as admirable or not in the light of our own religion and philosophy. Athene and Apollo, when held to the test, are seen to make for sweetness and light, wisdom and justice; Perseus and Prometheus make for self-devotion and self-sacrifice; but many of the Greek gods make for evil, and belong where Milton put them, along with Moloch, Belial, and Satan in the Fiery Lake. Even a young child will grasp the good points in a myth and see in the morals of the bad ones the reason why Greek paganism had to pass away when tried by Christian standards. Which goddess, Athene or Aphrodite, was worth the service of a life? Which queen was the ideal woman? Aphrodite assisted by Ares (there is a profound moral to the relation of these two, for war follows in the service of such love) could not protect Helen after she deserted her husband; Apollo and the Furies raised the hands of her own son against Clytemnestra because she killed her husband, who it must be admitted was a cruel and unjust man in his treatment of Achilles and in his sacrifice of his own daughter, Iphegenia, to his success in war; Heaven rewarded Penelope because she stayed true to her wandering spouse thru his absence of eighteen years. How did the ideal youth of Homer's time treat his mother? his old nurse? his swineherd? his guests? his friend?

his hosts? What did Wisdom require him to do for his father? How did he take up the responsibilities of life? call a meeting, and make a speech? How did he conduct himself on his travels? How did he pray to his gods? How did he treat his father after the return? And Odysseus, who was wise with the wisdom of Athene and not won away by the wiles of the beautiful goddess Calypso and the enchantment of Circe, but who endured the greatest of trials to return to his faithful wife—was he quite the perfect hero in his character of spoiler of cities? When he slew the less guilty among the suitors, who promised to reform their lives and to give ransom, could he in this equal the Christian knight-errant, who went forth to right the wrongs of others and granted mercy to a prostrate foe? Will the great Achilles stand that comparison when he denies the prayers of the aged Priam and gives the body of Hector to be mutilated, dragged, and devoured by dogs?

Is this kind of teaching, in motive and result, for history or for literature? Neither is secured without it, and the two seem inseparable, and are secured by it.

It is economical of effort if in the first year of the high-school course myths and the *Odyssey*, Plutarch's *Lives*, Macaulay's *Horatius*, and Shakespeare's *Julius Cæsar* are read and discussed in class while the classes are studying in history the Greek and Roman periods. While these selections give pagan ideas, they present a good variety of rhetorical types, with material for comment on narration, description, and dramatic presentation; and the study of their literary art can be made the more effective by assigning parallel exercises and essays in composition, some from modern life, some from ancient. One of the best essays that I ever read was a monologue by a ninth-grade pupil, excellent in imitation, poetic, lofty, high and serious in style, on the subject, "The Account That Hermes Gave to the Council of the Gods of His Mission to Ogygia"; another was an account in monologue of Odysseus sailing into the present harbor of New York and experiencing Coney Island before the fire. For individual reading in this year we may well require some Bible stories from the Old Testament, as (1) Abraham's sacrifice of Isaac (how does it compare with Agamemnon's sacrifice of Iphegenia?), (2) the bondage of Joseph, (3) the life of Moses, and (4) the wanderings of the Children of Israel. Discussion of the *Odyssey* will quicken an interest in the Bible, and pupils will come from this reading with a better vision of the material conditions of ancient life, the motives, and the morals involved. For independent reading in this grade I have known pupils to like *Ben Hur*, *The Last of the Mohicans*, *The Thrall of Leif the Lucky*, *The Little Shepherd of Kingdom Come*, *The Blazed Trail*, and *The Riverman*, but some prefer books of a lower grade. *The Little Colonel* stories and books by Henty and Alger still persist. I, for one, should never compel a pupil to finish a book, for home reading, that he did not like. If it cannot hold him he had better try something else. If it is a good book and he does not like it, he is probably too young for it, and may like it later. If there is a historical element in his book, it is doubly well.

I have written thus fully of the first year's literature to suggest the method for the rest of the course. In the second year many books on mediæval literature are fit for class reading and discussion, some of them by ninteenth-century writers—*Ballads*, *The Idylls of the King*, *Sir Launfal*, *The Ancient Mariner*, and *Ivanhoe*. These are sufficient to give a general idea of the Middle Ages, tho weak, as I have indicated, in selections from the Continent. To supplement this work pupils can present to the class as topics, in oral composition, other stories of phantoms, witches, goblins, fairies of the period. Some excellent stories from the Continent are accessible in the *Tales of a Wayside Inn* and the *Golden Legend*.

A still further advantage can be gained in the third and fourth years of the course by studying English and, finally, American masterpieces, in their periods; and their study will be more effective if a good textbook for reference be adopted on the history of English and American literature. If the history instead of the literature is the purpose of the course, and predominates—especially if the literature is read about, and not read—

the study of both the history and the literature will be ineffective; but if the masterpieces are read with a sufficient background of knowledge of the period and the life of the author, not only will their study as literature be more effective, but the history of literature will incidentally be more effectively acquired at the same time. Another advantage in this arrangement of the masterpieces is that if circumstances are favorable a considerable amount of supplementary material can be added, by insertion of additional reading, or by provision for topics to be presented as oral composition. So, when the class are considering the drama before reading *Macbeth*, each member can tell the substance of some early drama, such as Marlowe's *Faustus*.

By a chronological arrangement of pieces from English literature, the first half of the third year will present, still, mediæval subjects, tho emerging into modern, (1) the *Prologue*, (2) the *Faerie Queene*, and (3) *Macbeth*. Modern tendencies toward reformation and revolution are found in two of the three, as well as new types of composition. The second half of this year will study Milton, Burke, and Burns, with a still more modern spirit and relation to reform and revolution, as well as contributions to literary form.

The first half of the fourth year will include writers of the nineteenth century in England—Wordsworth, Shelley, Keats, Scott, Macaulay, Dickens, George Eliot, Browning, Tennyson, and as many others as are desired. Pupils will now be old enough and well enough prepared to do considerable independent reading, which discussion in the class will direct, always attentive alike to spirit and to rhetorical form.

The last half of the year will give still further developments in American literature, the masterpieces for study being the *Farewell Address*, *Bunker Hill Oration*, and *House of Seven Gables*, good examples of the highest political and social ideals attained, and of fit literary form. A textbook of the history of American literature for biography and movements in periods, and an extended system of individual reading will here secure excellent results in grasping the subject as a whole, besides securing special interest in parts.

A pupil who has seen his subject of study presenting matter so vital and so useful as the study of the content and form of literature is capable of being, should come from it with appreciation of its spirit and a consciousness of practical value received. If he does not, it may be that he is at fault—it may be, his teacher. Let us see to it that it is no longer his haphazard and ineffective course.

DISCUSSION

Samuel S. Seward, Jr., assistant professor of English, Leland Stanford Junior University, Stanford University, Cal.—The viewpoint from which I regard the subject of college-entrance examinations in English is not one of familiarity with the workings of the College Entrance Examination Board. On the contrary, the conditions under which I have worked and observed and experimented here in California have been singularly free from all direct influence of that board. If there be anything, therefore, which we of California can contribute to the problems before this committee, it is not by reason of our dissatisfaction with an examination system forced upon us from without, but from our experience with conditions that we have shaped, in perfect freedom, ourselves. Of course I cannot speak for California in any official, representative sense; the state university could better do that, or the high-school teachers themselves thru their accredited organizations. But roughly speaking, I think it is fair to say that our experience at Stanford, gained both from the students we receive and the teachers we know, puts us in touch with the conditions in the state as a whole, and makes it possible to make certain broad generalizations in its name. And when, in contrast, I speak of "the East," I do so in the same sense—broadly, and for the sake of convenience, with full realization of the qualifications that strict accuracy would require. The situation, in a word, then, is this: In the East the number of colleges and the variety of their needs have

created a complex problem, each step in the solution of which has been, perforce, painstaking and deliberate; while in California, on the other hand, our comparative isolation has made it easy to depart radically from the traditions prevailing in the eastern states, and to modify our practice, in experiment, with comparative freedom from influence from without.

When I came to this state, eleven years ago, I was surprised to find that its practice in the matter of entrance examinations in English differed from those I had been brought up to in New York in three important particulars: First, instead of the examination system pure and simple, I found a system based on the principle of accrediting the work done by responsible high schools—accepting recommended work with some qualifications, to be sure, yet recognizing the broad principles upon which the accrediting system is based. In the second place, I found that the high-school course in literature was based, not on a rigidly prescribed list of books, but on a long list of literary works, grouped according to type, from which the teacher would make free selection within certain prescribed limits. Finally, the subjects for the test in composition were taken, not from the topics dealt with in the literature classes, but from the personal experience of the student wherever it touched real life and thought.

The pleasure with which I recognized the freedom of these conditions, the humanness of them, would be hard to express, and it is wholly natural that while working in the new environment thru a course of years I should observe with interest the tendencies that have been manifesting themselves in the eastern states thruout this period. Changes have been made, and others are discussed and warmly advocated; and the direction of all these changes has seemed to me significant indeed.

What do we find? The system of accrediting, to which we in the West are more and more thoroly committed, gains advocates in the East every year. The examination system is no longer taken for granted; certain disadvantages of it become more and more apparent; and even where it is retained, the advisability of modifying it in the direction of the accrediting system is being seriously considered. The recognition of the principle of recommending students that Harvard has recently given in her alternative requirements for admission is deeply significant of this tendency. Significant, too, is the fact that the most far-reaching problem before this conference is the question whether the examination system, as applied to English, ought to be supplanted by the accrediting system or by some other perhaps based upon it.

When we turn to the subject of the choice of literary works in the literature classes, we find that the College Entrance Examination Board has definitely accepted the system of choice among a fairly large range of books grouped according to type.

Finally, the wisdom of basing the test in composition upon subjects drawn from the study of literature is at last being seriously questioned, and one of the problems before this conference is as to whether it would not be preferable to draw topics for this test from the wider experience of the student outside of the classroom and the study.

It appears, in short, that the gap between our practice in California and the earlier system of the College Entrance Examination Board tends more and more to draw together, and that our experience here has a more and more direct bearing on the problems agitating the teachers of English thruout the country.

All this that I have said suggests a possible solution to some of the questions that now confront this body; but before we approach the practical aspect of the problem it is appropriate that we consider a fundamental principle lying at the heart of the whole subject. We are accustomed to speak of composition and literature as parts of the general subject of English, and it is the most natural to think of them as essentially one, because they are taught by the same teacher and examined by the same department. Yet when we consider the nature of the two studies we find a radical difference separating them. The aim in literary study is to appreciate; its method is to study another's

self-expression; the real test of success is the student's ability to enter imaginatively into experience outside of himself, and so to expand his own capacity for emotional and intellectual sympathy. The aim of composition, on the other hand, is to construct; its method is to build a complete, harmonious whole out of the student's own experience; and its test is the student's ability to communicate effectively to another his own feelings and thoughts. In the one subject he takes in; in the other he gives out. It follows, therefore (and this is the important point), that whereas training in literary appreciation is by its very nature different from the discipline of other subjects—mathematics, history, physics, etc.—training in composition, or constructive expression, is an indispensable element in successful study of every kind. The student of geometry, of history, of physics, must in every case, if he is to command his subject for effective use, be able to express clearly to another the results of his study. The teacher who trains him to do this, therefore, works not in the interest of his own department alone, but in that of every other subject represented in the curriculum. Some recognize this principle in advocating that composition be taught not by the literature teacher alone, but by all the teachers of all subjects. But whether or not this be a wise method to try to put into practice, this much is clear: the results of good teaching in composition are shared, to an extent untrue of any other subject, by all the teachers of all the subjects in school or college.

This brings us to the practical suggestions for solving the problem before us:

1. Emphasize the distinction between the two subjects by basing the test in literature upon the books studied, and that in composition upon the candidate's general knowledge, observation, and experience.

2. In recognition of the subtlety of literary appreciation, apply the method of certification frankly and freely, within such limits as seem wise, to literature. Compared with the student's capacity to receive pleasure, which can never be adequately tested, his accumulated knowledge is a matter of little moment. It is best to free such teachers as are capable of stimulating literary appreciation to do their best work, and to leave unliterary discipline to the charge of other departments.

3. Reserve a test in composition as a uniform requirement of all students who profess themselves capable of taking up college study effectively. Require a recommendation from the school, based on a thoro course in the subject, but supplement it by practical demonstration of the student's power to think upon paper, and to express his thought in clear, idiomatic, correct language.

These principles we have tested in California thru an experience of many years, and we feel that their value has been amply proved. It seems, too, to be a significant sign of tendency that the new plan adopted by Harvard aims at the very result that we have been trying to achieve—that of recognizing the responsibility of the high-school teacher and leaving him in freedom to accomplish his work in the way he can do it best, and at the same time reserving for the college a test whereby it may judge the quality of intellectual power that the student has gained in his school course.

It may be of interest to add a practical example of what would be considered at Stanford a good test of a student's powers in composition. The subjects set must be large enough in variety and general enough in statement to offer sufficient choice to all the students who apply for admission. They must be of such a nature that girls, as well as boys, may find suitable material for self-expression. They should be so grouped that the method of treatment—narration, description, exposition—is clearly indicated:

GROUP I.—NARRATION (CHOOSE ONE)

An Episode of School Life A Vacation Experience	Stories of personal experience
An Incident in the Life of a Favorite Historical Character	For the unimaginative student
My Experience in a Balloon	For the imaginative student

GROUP II.—DESCRIPTION (CHOOSE ONE)

My Favorite Aunt (or any other relative)
My Room, When I Like It Best
A Garden Scene
Where We Camped

GROUP III.—EXPOSITION (CHOOSE ONE)

How Athletics (or any other activity) Are Managed in My School
Reasons for Approving (or disapproving) of High-School Fraternities
A Public Question of Present Importance
A Desirable Occupation for Women

B. MATHEMATICS

PROVISIONAL REPORT OF THE NATIONAL COMMITTEE OF FIFTEEN ON GEOMETRY SYLLABUS

PRELIMINARY STATEMENT

At the meeting of the National Education Association in Cleveland, in 1908, the mathematics Round Table of the Secondary Department, numbering some two hundred members, unanimously called for a national committee to study and report upon the question of a syllabus for geometry. In December, 1908, the American Federation of Teachers of the Mathematical and Natural Sciences, at its meeting in Baltimore, authorized the appointment of a national committee of fifteen on geometry syllabus. At the Denver meeting of the National Education Association in 1909, the Secondary Department authorized the committee which had already been appointed by the American Federation to proceed under the joint auspices of the two national bodies.

The committee thus constituted was made up of eight representatives of secondary schools and seven representatives of universities, as follows: William Betz, East High School, Rochester, N.Y.; Edward L. Brown, North High School, Denver, Colo.; William Fuller, Mechanic Arts High School, Boston, Mass.; Walter W. Hart,[1] Shortridge High School, Indianapolis, Ind.; Frederick E. Newton, Andover Academy, Andover, Mass.; Eugene R. Smith, Polytechnic Preparatory School, Brooklyn, N.Y.; Robert L. Short, Technical High School, Cleveland, Ohio; Mabel Sykes, Bowen High School, Chicago, Ill.; Charles L. Bouton, Harvard University; Florian Cajori, Colorado College; Herbert E. Hawkes,[2] Yale University; Earle R. Hedrick, University of Missouri; Henry L. Rietz, University of Illinois; David Eugene Smith, Teachers College, Columbia University; Herbert E. Slaught, *Chairman*, University of Chicago.

After an extended preliminary correspondence in which each member of the committee submitted to all the other members a full statement of his views on all phases of the work in hand, including desirable methods of procedure, the investigations of the committee were conducted in three subdivisions of five members each, the first dealing with "logical considerations," under the chairmanship of David Eugene Smith; the second having charge of "exercises and problems," under the chairmanship of Henry L. Rietz; and the third determining the "lists of theorems," under the chairmanship of Earle R. Hedrick.

These subcommittees carried on their work by correspondence and in some cases by meetings of their members during a period of a year and a half, the results being submitted from time to time to the general committee for suggestions and criticisms. A meeting was then held in Cleveland, Ohio, on November 24, 25, 26, 1910, at which were present the three subchairmen, the general chairman, and three other members. All the recommendations of the subcommittees were submitted to a searching examination in the course of which they were either passed, eliminated, amended, or reconstructed, until finally substantial agreement was reached on all points; whereupon it

[1] Now assistant professor of mathematics at the University of Wisconsin.
[2] Now professor of mathematics at Columbia University.

was decided to print the report in the form thus evolved and to submit it to one hundred or more selected critics for further suggestions before its final presentation at the San Francisco meeting in July, 1911.

The report contains a historical introduction prepared by Florian Cajori; a section on logical considerations, including axioms, definitions, new terms, and symbols, treatment of limits and incommensurables, time and place in the curriculum, purpose of the study of geometry; a section on the grading and distribution of exercises, algebraic and geometric types of exercises, special classes of exercises such as loci problems and problems in concrete setting, and the correlation with other subjects such as arithmetic and trigonometry; a section on types of courses for special classes of students and on preliminary inductive courses in the grades; and finally the syllabus itself exhibiting by means of distinctive forms of type the varying degrees of emphasis which may properly be attached to the different theorems both as to their importance in the logical chain and as to their richness in applications.

In the preparation of this report the various syllabi published in this country and in foreign countries have been consulted. With one of these—the syllabus published by the Association of Mathematics Teachers in New England—this report makes direct comparison, indicating both omissions from, and additions to, that document.

The report in provisional form has been published in full in *School Science and Mathematics*, issues of April, May, and June, 1911. The table of contents and the historical introduction are printed herewith. The remaining sections are subject to further suggestions, criticisms, and modifications which have been freely invited by the committee from all sources and especially from one hundred selected teachers to whom advance copies were submitted. All suggestions will be carefully considered by the committee and the report in final form will be submitted to the Mathematics Section of the Secondary Department at the meeting of the National Education Association in 1912. Meanwhile, as soon as the committee can digest and act upon the suggestions which may be submitted, the report as thus modified will be reprinted thru *School Science and Mathematics* and distributed to teachers of geometry as widely as possible.

CONTENTS

	PAGE
PRELIMINARY STATEMENT	1
(A) HISTORICAL INTRODUCTION:	
Bibliography	2
France	4
Germany	10
Italy	15
England	19
United States	24
(B) LOGICAL CONSIDERATIONS:	
Axioms	28
Definitions	31
Informal Proofs	33
Limits and Incommensurables	35
Time and Place in the Curriculum	35
Purpose in the Study of Geometry	37
Points on Solid Geometry	39
(C) SPECIAL COURSES	40
(D) EXERCISES AND PROBLEMS:	
Distribution, Grading, and Nature	43
Sources of Problems	47
Problems Involving Loci	54
Algebraic Methods in Geometry	57
(E) SYLLABUS OF GEOMETRY:	
Preface to Lists of Theorems	59
Theorems on Plane Geometry	63
Theorems on Solid Geometry	70
CONCLUSION	76

SECTION A. INTRODUCTION

ATTEMPTS MADE DURING THE EIGHTEENTH AND NINETEENTH CENTURIES TO REFORM THE TEACHING OF GEOMETRY

Bibliography

The following six books bearing on the history of the teaching of geometry have been found most useful in making this compilation:

1. V. BOBYNIN—"Elementare Geometrie," being chap. xxii in Cantor's *Vorlesungen über Geschichte der Mathematik*, Vol. IV (Leipzig, 1908), pp. 321–402. (Covers the second half of the eighteenth century.) Referred to as "Bobynin."
2. F. KLEIN—*Elementarmathematik vom höheren Standpunkte aus. Theil II; Geometrie* (Leipzig, 1909), pp. 433–515. Referred to as "Klein."
3. J. PERRY—*Discussion on the Teaching of Mathematics.* British Association Meeting, 1901. Referred to as "Perry."
4. H. SCHOTTEN—*Inhalt und Methode des planimetrischen Unterrichts.* Leipzig, 1890. Referred to as "Schotten."
5. M. SIMON—*Ueber die Entwicklung der Elementar-Goemetrie im XIX Jahrhundert.* Leipzig, 1906. Referred to as "Simon."
6. A. W. STAMPER—*A History of the Teaching of Elementary Geometry.* New York, 1906. Referred to as "Stamper."

Other useful sources of information on the history of the teaching of geometry are as follows:

1. *Reports of the Association for the Improvement of Geometrical Teaching* (in England). The name of the association has been changed to "The Mathematical Association," and its present organ is the *Mathematical Gazette.*
2. *Zeitschrift für mathematischen und naturwissenschaftlichen Unterricht,* Leipzig and Berlin. Formerly called *Hoffmann's Zeitschrift,* now *Schotten's Zeitschrift.*
3. *L'enseignement mathématique. Revue internationale.* Paris.
4. *La revue de l'enseignement des sciences.* Published monthly. Paris.
5. *Nature* (London). See Indices for "Geometry."
6. D. E. SMITH—*The Teaching of Geometry.* Boston, 1911.
7. G. LORIA—*Vergangene und künftige Lehrpläne.* Deutsch von H. WIELEITNER. Leipzig, 1906.
8. G. LORIA—*Della varia fortuna di Euclide.* Rome, 1893.
9. R. FRICKE—"*Ueber Reorganisationsbestrebungen des mathematischen Elementarunterrichts in England.*" Jahresbericht d. deutsch. math. Vereinigung, Vol. XIII (1904), p. 283, etc.
10. KLEIN-SCHIMMACK—*Vorträge über den mathematischen Unterricht an den höheren Schulen.* Leipzig, 1907.
11. *Plan d'études et programmes d'enseignement dans les lycées et colléges de garçons.* Paris, 1903.
12. A. W. Stamper's list of references at the end of his book.
13. The various histories of mathematics.

FRANCE

France began to maintain a critical attitude toward Euclid as a textbook in geometry for beginners as early as the time of Petrus Ramus (1580). Ramus treated geometry as the art of accurate measurement. In the eighteenth century this spirit of independence was intensified by the publication of Clairaut's *Eléments de géométrie* (1741), in which surveying and other practical matters received marked attention. In the latter

half of the eighteenth century Euclid ceased to be used as a textbook in France.

Williamson, in his edition of Euclid, 1781, criticizes Clairaut as follows:

> Elements of geometry carefully weeded of every proposition tending to demonstrate another; all lying so handy that you may pick and choose without ceremony. "This is useful in fortification;" "you cannot play at billiards without this." "You look through a telescope like a Hottentot until this proposition is read," with many such powerful strokes of rhetoric to the same purpose. And upon such terms, and with such inducements, who would not be a mathematician? Who would go to work with all that apparatus which I have described as necessary for understanding Euclid, when he has only to take a pleasant walk with Clairaut upon the flowery banks of some delightful river, and there see, with his own eyes, that he must learn to draw a perpendicular before he can tell how broad it is?

About 1836 De Morgan remarks that these arraignments are not "without their force, when directed against experimental geometry as an ultimate course of study, [but] lose their ironical character and become serious earnest, when applied to the same as a preparatory method." De Morgan strongly favors a geometry like Clairaut's as a preparatory course.

The critical attitude of Ramus and Clairaut toward the *Elements* of Euclid brought to the mind of D'Alembert the questions: "What are the elements of a science? What should be the contents of a book called Elements?" D'Alembert gives his answers in two articles, "Eléments des sciences," and "Des éléments de géométrie" in the *Encyclopédie méthodique* (about 1784).[1]

D'Alembert distinguishes between two kinds of elements of a science:

1) If all truths or theorems of a science which are the foundation for all others are brought together, so that these truths or theorems potentially comprise the whole science, then these constitute, when properly co-ordinated, the *elements* of the science. In geometry, such elements embrace not merely the principles of mensuration and the properties of plane figures, but also the application of algebra to geometry, and the differential and integral calculus in its application to curved lines.

2) The elements of a science may be defined also as comprising those truths or theorems which treat the subject-matter in the simplest way, and which constitute, together with their deductions, a detailed study of the simplest parts of the science. By the elements of geometry, elements of this kind are usually meant; they include only the properties of plane figures and the circle.

Dissatisfied with the elements of geometry known in his day, D'Alembert sets up the following demands which such texts should fulfill:

1) The text should develop the subject along the path pursued by the discoverers of the science, so as to show the truths in their natural relations to each other.

[1] *Encyclopédie méthodique, Mathématiques I*, 617–25; III, 133–36. We have used the Italian translation of this dictionary (Padova, 1800), and also a full abstract of these articles, given by Bobynin. See Bobynin, p. 325, etc.

2) The usual division of the subject into longimetry, planimetry, and stereometry does not provide for the circle and sphere and is therefore inadequate. The division into plane geometry and solid geometry, D'Alembert does not consider at all. He suggests the division into the geometry of the straight lines (considered with respect to position and relative magnitude) and circles, the geometry of surfaces and the geometry of solids. The straight line and circle must be taken up together. The circle renders immense service in considering the position of lines. The measurement of angles by circular arcs and the principle of congruence constitute the basis of the first part of the geometry of lines, upon which other theorems of this part rest. The second part in the geometry of the straight line has as its fundamental theorem the one on the section into proportional parts of two sides of a triangle by a line parallel to the third side. This involves incommensurables.

3) Incommensurable relations must be treated by the apagogic method, according to which it is shown that one ratio cannot be greater or smaller than a certain other ratio, hence it must be equal to that other ratio. He uses this for the following reasons: Incommensurable magnitudes involve the idea of the infinite and therefore, he claims, cannot be treated by any direct method. Notwithstanding this difficulty presented by incommensurable lines, he maintains that they should be taken up early in geometry, because of their importance. He states that the whole theory of incommensurables demands only one theorem, concerning the limits of quantities, viz., "Magnitudes which are the limits of one and the same magnitude, or magnitudes which have one and the same limit, are equal to each other." In the geometry of the circle, of surfaces and solids, he feels that the method of exhaustion or that of limits should be used.

4) A suitable text on the elements of geometry can be prepared only by a mathematician of the first rank. D'Alembert complains that most elementary geometries are written by men of little ability.

5) To lay down definitions at the beginning without any analysis of the subject is not only contrary to sound philosophy but contrary to the natural march of thought.[1] Axioms are useless.

Ideas similar to those of D'Alembert are embodied in a text on geometry by Louis Bertrand of Geneva,[2] who in Berlin had been close to Euler. Bertand's book antedated D'Alembert's articles in the *Encyclopédie méthodique*. Like D'Alembert he divides geometry into three parts: (1) geometry of line and circle, (2) measurement of parts of a plane bounded by straight lines and circles, (3) measurement of curved surfaces and solids. Bertrand ignored the classification of geometry into plane and solid. His second theorem is: "When two planes intersect, their common

[1] See "Axiome" and "Courbe" in *Encycl. méth.*

[2] *Développement nouveau de la partie élémentaire des mathématiques*, Geneva, 1778.

section is a right line." The straight line and circle are taken up together at the beginning as D'Alembert would have it. The incommensurable case is treated by the *reductio ad absurdum* method. In the latter part of the geometry he uses also the method of exhaustion. Bertrand reduces the number of theorems, in one instance, by replacing theorems on the mensuration of prisms, pyramids, cylinders, cones, and spheres by the corresponding problems.

Bertrand's work was published in two unwieldy volumes and had little sale, yet exercised some influence, particularly upon Lacroix, whose *Cours de mathématiques*, published at the close of the eighteenth century, has been used until recently. Lacroix divides his geometry into geometry of the plane and geometry of space, and does not follow D'Alembert closely. According to Lacroix there are only two kinds of theorems that should find a place in an elementary geometry: (1) theorems necessary for the comprehension of the line of argument, developed synthetically; (2) theorems which grow out of the practical operations in geometry (drawing and measuring). He objects to placing all axioms at the beginning, believes in the omission of the definition of an angle, favors "a straight line is the shortest path between two points" as growing out of the child's experience, and uses the apagogic method for incommensurables.

Another author of note was Bézout, who followed D'Alembert's plan quite closely, but was criticized for his lack of rigor and for his endeavor to lighten the work of the examiner as well as of those being examined.[1]

The most celebrated work on elementary geometry is that of Legendre (1794). He came nearest to fulfilling D'Alembert's requirement that the elements be written by a mathematician of the first rank. He does not follow D'Alembert's plan for a book on geometry, nor does he heed the philosophic demand that the author should follow the path of the originators of the science. Impressed by the lack of rigor in the works of his day, he aims at greater rigor and approaches closer to Euclid than his predecessors had done. He does not divide geometry in the manner of D'Alembert and Bertrand. Like Euclid, Legendre begins with definitions and axioms. The first four chapters are given to plane geometry, the last four to solid. The first book treats of the equality of angles and triangles, the second of the circle and the measurement of angles, the third of proportional figures, the fourth of regular polygons and the measurement of the circle. Legendre uses in measurement the terms *equal* and *equivalent*. He uses the *reductio ad absurdum* method for incommensurables and the method of exhaustion for curved lines.

What was it that made this book so successful? In the first place must be mentioned his great clearness of exposition and his attractive style. A great advance of Legendre over Euclid was the fuller treatment of solid geometry. He leans less toward logic and more toward intuition

[1] Bobynin, p. 355.

than does Euclid. In place of Euclid's famous fifth book on incommensurables, Legendre borrows rational and irrational numbers from arithmetic, even tho in arithmetics of his day no scientific treatment of those subjects was given. A theorem true for rationals is assumed to be true for irrationals. Thus, if A:B=C:D, then AD=BC in all cases. Klein says that this is in accordance with the practice of the best mathematicians of his day, that even Lagrange works out the expansion of $(x+h)^n$ when n is rational and assumes the results thus obtained to be true for irrational values of n. Legendre stands for a fusion of geometry, not only with arithmetic, but also with trigonometry. As late as 1845 Legendre's geometry still contained trigonometry, but as Klein remarks,[1] the trigonometry and the practical applications of geometry were gradually filtered out. Comparing A. Blanchet's edition of 1876 with an edition of 1817, we find also that the twelve "Notes" on topics of elementary geometry, covering 55 pages in the older edition, are omitted in the later edition. The later edition has a somewhat fuller treatment of solid geometry and a list of exercises in original proofs, loci, and constructions. Other notable changes were made in the 1845 edition by J. B. Balleroy and A. L. Marchand. They state that Legendre uses the *reductio ad absurdum* method to excess, a method which "convinces but does not satisfy the mind." Legendre's text is, however, left intact, alternative proofs being given in notes at the end. These alternative proofs, as well as the proofs given in the modified text of the 1876 edition, are rough applications of the theory of limits.

During the first half of the nineteenth century, and even later, the works of Legendre, Lacroix, and Bézout were used extensively in France. In later editions less stress was laid upon practical applications and numerical computation. Otherwise few changes occurred. In general, school organization based on the regulations of the time of Napoleon I, was quite fixed in France until 1870. France has a rigid centralization of authority in education. If the "Conseil d'instruction supérieure" decides upon a change, the whole country adopts it at once. As compared with the German, the French teacher has little individual freedom. France is a country with a "system of revolutions from above."[2] Since 1870 the movement has been toward greater individual freedom. The later tendencies in geometry are imaged in the work of Rouché and de Comberousse, which contains a large amount of new material and meets the demands of the one-year course of the *classe de mathématiques spéciales*, during which as much as seventeen hours per week are given to mathematics and a degree of specialization is allowed in preparation for university courses as in no other country. In 1902 and 1905 new official courses of study were adopted in France in which greater stress is laid upon graphic representation, the idea of a variable and a function, and upon the practical

[1] Klein, p. 470.

[2] *Ibid.*, p. 457.

applications of mathematics. The introduction of the derivative in algebra in the regular secondary classes, the use of motion in geometry, and emphasis on geometric drawing are other characteristic features of this reform. This new tendency is mirrored in the geometry of E. Borel, a valuable book, in which the practical receives due emphasis and in which intuition meets with fuller recognition. With Borel the concept of motion is prominently used. There is an introduction of eight pages on the use of the ruler, compasses, and protractor, and ten pages on the mensuration of surfaces and solids, treated empirically. Applications are skillfully interwoven with theory, thruout the book. He has well-selected practical exercises involving symmetry, the nets of regular polygons, the use of pulleys, etc. Algebraic geometry and the development of metric properties come last in the book. He introduces the rudiments of trigonometry. The usual division into plane geometry and solid geometry is not rigidly maintained. A similar tendency is shown in the recent geometries by C. Bourlet (1908), Fort and Dreyfus (1908), and Niewenglowski (1910).

A parallel and somewhat different tendency in France is seen in the geometry of Ch. Méray of Dijon, which was first brought out in 1874 but has only in recent years received much attention. Méray represents the severely logical mode of exposition;[1] he uses in his proofs no fact of observation which has not been previously set down in an axiom; he formulates a complete list of axioms, but introduces each only when it is needed; nor does he aim to limit their number to a minimum. Characteristic of Méray is the complete fusion of plane and solid geometry, and the use of motion, not only as a means of proof, but also to define parallels. Recently there has been considerable discussion in France on the question whether, in laying the foundations to geometry, motion should be used or not. The defenders of a static theory of parallels claim that motion cannot be visualized on the board, rendering intuition more difficult. The defenders of the kinematic theory advocate the use of movable figures.[2] Prepared under the influence of Méray, so far as the use of motion is concerned, are the geometries by Borel, Bourlet, Fort and Dreyfus, and Niewenglowski, above mentioned.

Influenced by the Perry movement in England and America, France is experimenting on the laboratory method of instruction.[3] A mathematical laboratory has been recently founded by J. Tannery and E. Borel at the Ecole normale supérieure in Paris in order to give prospective instructors an insight into the possibilities of this method of teaching.

[1] Klein, p. 475.

[2] Schotten, *Zeitschrift*, Vol. XL (1909), p. 445; *La revue de l'enseignement des sciences*, many articles in Vols. I–III.

[3] Schotten, *Zeitschrift*, Vol. XL (1909), pp. 444–45; *L'enseignement mathématique*, XI, p. 206.

GERMANY

Klein[1] expresses surprise that, during the Renaissance, Euclid should have come to be looked upon as a text suitable for the first introduction in geometry. Perhaps the reason for this attitude toward Euclid lies in the fact that geometry was first taken up in the universities by students of maturer years. As geometry came gradually to be taught to younger and younger pupils, Euclid was still retained. Thus the misconception arose that Euclid was a suitable geometrical text for young boys.

While D'Alembert formulated his ideas on elementary geometry in France, A. G. Kästner evolved in Germany a type of his own, in his work, *Anfangsgründe der Arithmetik, Geometrie, Trigonometrie, und Perspectiv*, Göttingen, 1758. Kästner begins with definitions and axioms in Euclidian style, develops the geometry of the plane (69 pages) and ends this part with practical applications (47 pages). The second part of the geometry begins with the geometry of space (60 pages), continues with 31 pages given to plane trigonometry and its applications to the solution of triangles, and with 9 pages of practical geometry. Then follow spherical trigonometry and 24 pages on perspective. The method of exhaustion is used. It was the opinion of Kästner that "the newer works on geometry lose the more in clearness and thoroness the farther they depart from Euclid." He complains that modern authors, particularly the French, have departed from the ancient rigor, "to make the study of mathematics easier for people whose main occupation is not study, namely, for soldiers."

Not without interest is W. J. G. Karsten's *Lehrbegriff der gesamten Mathematik*, in eight volumes, 1767–77, the first two volumes of which are given to arithmetic and geometry. Karsten begins with arithmetic, then proceeds to plane geometry, closing with simple arithmetical applications. He proceeds thereupon to solid geometry, returns to arithmetic, and gives the rudiments of algebra with logarithms, followed by trigonometry and its applications to plane geometry. Finally are given the rudiments of spherical trigonometry and a fuller treatment of solids. Nowhere are heavy demands made upon the pupil. That this exposition was intended for students of university grade rather than those in the preparatory school, testifies to the low state of mathematical instruction in German universities of the eighteenth century. Close relation between arithmetic, geometry, and trigonometry is also maintained in the works of J. G. Büsch (1776) and G. S. Klügel (1798), the aim being to make the subject easy of comprehension.

In the nineteenth century, until near its end, advanced mathematicians in Germany took little or no part in the improvement of the teaching of elementary mathematics. In geometry, Euclid's text was not usually taught, but the dogmatic method of Euclid was in vogue during the first half. About the middle of the century Euclid's order of the theorems came to be criticized as chaotic. It is interesting to see the Germans

[1] Klein, 434–35.

attack Euclid's order as arbitrary and the English defend it as the only order worthy of serious consideration. The grouping of theorems according to subjects came to be discussed in Germany.[1] The advocacy of object-teaching by Pestalozzi, the championing of Pestalozzianism by Herbart, the attacks upon mathematical reasoning and particularly upon Euclid that were made by Schopenhauer[2] conspired to influence the teaching of geometry.

About 1860 the genetic method (called "heuristic" when the inventional side was emphasized) came to be discussed. This makes a plea of being a natural method, since it incites self-activity in the pupil. With the genesis of a theorem the pupil sees intuitively its inner relation to other theorems; he not only sees whence he came but also whither he is going; the reader of Euclid is blindfolded, so to speak, and then somehow transported to the next station. It is difficult to prepare textbooks for the genetic method. The teacher by careful questioning one moment leads the student, the next moment follows him, and no one can foresee the exact path which this mode of advance will mark out. It is not strange, therefore, if many teachers proceeded heuristically while the texts retained mostly the dogmatic form.[3] Moreover, experience made it plain to teachers that the dogmatic statement of theorems has a high mnemotechnic value.[4] While the genetic method in its pure form has not succeeded in establishing itself, it has exerted a strong influence by shifting the emphasis from the memorizing of proofs to the cultivation of originality and logical reasoning.

Another movement that sprang from the teachings of Pestalozzi and Herbart was the adoption of preliminary courses on observational geometry and drawing, about 1870. Such courses had been recommended long before this time. This movement was stronger in Germany than in England and France. In their propædeutic courses the geometry of solids was to receive consideration and a taste of the genetic method was recommended. The pupils acquired dexterity in the use of ruler and compasses. Propædeutic courses have maintained their place to the present time.

Herbart made strong endeavors to remove the superstition that had arisen in early days when Euclid was placed in the hands of young and immature students, to the effect that mathematics could be learned only by a few pupils endowed with special gifts. According to his view the fault lies as a rule in the abstract character of the early instruction; the introduction of propædeutic courses and the greater emphasis upon *Anschauung* at all stages had shown that most students can master mathematics. Whether "amathematicians" do exist in rare instances, is a question which Klein refers to experimental psychologists for reply.[5]

[1] Schotten, p. 11.
[2] Klein, p. 503.
[3] Schotten, p. 96.
[4] *Ibid.*, p. 13.
[5] Klein, p. 499.

A third movement agitated in Germany was in favor of the introduction into elementary instruction of the concepts of the modern projective geometry. It originated about 1870.[1] The criticism was made that Steiner, Möbius, and von Staudt had been so busy with their researches as to make no attempt to reform elementary instruction, and that text-book writers had ignored the researches of these great men. The leaders in this attempt to incorporate modern methods were Schlegel and Fiedler. A concomitant of this program was the breaking down of the division of geometry into plane and solid, and the effort by the use of models, etc., to make geometry more concrete. To effect this reform, a number of texts by Schlegel, Müller, Kruse, Becker, Worpitzky, Henrici, and Treutlein sprang into existence.[2] Aside from the production of interesting textbooks this agitation has had little success. The books in question were seldom used.[3] Can it be that D'Alembert's dogma is, after all, based upon truth—the dogma that the historical order of development of geometry is the pedagogical order; that is, the easiest approach to the science for the young mind? Are the concepts of projective geometry more difficult to grasp than those of the older geometry, or did the texts just named overtax the pupils, and perhaps in other ways violate the demands of sound pedagogy?

Most interesting are the statistics gathered in Prussia in 1880, which showed the following distribution of geometrical texts: Kambly was used in 217 institutions; Koppe in 54; Mehler in 44; Reidt in 29, while 55 texts were used in one institution each. Kambly's "clever but unscientific book" was first issued in Breslau in 1850 and a few years ago reached the 101st edition in the revision by Roeder. Koppe was looked upon as an inferior work, yet it enjoyed great popularity. On the other hand, books like those of H. Müller and even Henrici and Treutlein seldom passed beyond the second edition. This most astonishing success of works considered as scientifically inferior, requires explanation. Schlegel says[4] "that the quality of the books most widely adopted allows one to draw an inference respecting the scientific level of the instruction generally reached in that subject." But this remark considers merely one phase of this question. May not the mass of teachers have had a feeling or insight concerning textbooks which involved questions of intuition or other psychologic matters that the writers of the more scientific books overlooked? Simon[5] points out that until recently the German teacher, unlike the French, enjoyed complete freedom in teaching, and that small texts, like Kambly, allow his individuality much wider play.

Kambly's *Elementar-Mathematik* was made up of four parts: first, arithmetic and algebra; second, planimetry; third, plane and spherical trigonometry; fourth, stereometry. Of interest here, is the interpolation

[1] Schotten, p. 18.
[2] *Ibid.*, p. 19.
[3] *Ibid.*, p. 20.
[4] *Ibid.*, p. 21.
[5] Simon, p. 25.

of trigonometry. We have before us Kambly's *Planimetrie*, 43d edition, Breslau, 1876. Among the points of popularity we mention the following:

1. The book contains only as much matter as a class can conveniently finish in one year. Skipping parts of a book, says Kambly, has a bad effect upon both pupils and parents.

2. The diction is clear and simple. Mathematical symbols are used freely. The setting of the type is such as to enable the eye more quickly to see the relations set forth.

3. The arrangement of the book is such as to allow the teacher much freedom. He may, for instance, omit incommensurables altogether, or else substitute for certain proofs in the regular text others given in the footnotes where rough proofs are found for incommensurable cases.

4. Easy arithmetical applications, original theorems, and original constructions are given at the end of the book, so that some, or all, may be conveniently taken or omitted, according to the preference of the teacher.

Koppe's *Planimetrie* made somewhat greater demands upon the powers of the pupil than did Kambly, but incommensurables were treated only in footnotes or in remarks following the proofs of theorems. In Lübsen's *Elementar-Geometrie*, I have not been able to find a reference to incommensurables. It differs from Kambly and Koppe in having better figures and in having them on the page where they are needed, instead of at the end of the book on separate sheets that unfold. A clever feature in Lübsen are the practical applications introduced from the very beginning. How to run a straight line over undulating country by the use of poles, is explained in several diagrams on the first pages. Other figures show how to determine the distance between points on opposite banks of a river.

Since about 1890 the activity of Felix Klein, of Göttingen, in mathematical reform has been very great. For the first time since the death of Kästner, is the influence of university professors upon the teaching of elementary mathematics in Germany beginning to be strongly felt. Among the defects of geometrical instruction, he points out the insufficient fusion of the various branches of elementary mathematics.[1] Thus, too little attention is given to drawing of solids and to projection, to the idea of motion in a figure to replace Euclidian rigidity, to the fusion of arithmetic and geometry, to the introduction of the co-ordinate representation of analytics. On the other hand, the construction of triangles from given data is overemphasized,[2] as is also the study of the curious points and lines in the geometry of the triangle. This last criticism applies even more strongly to English textbooks.

Klein points out that modern demands in geometric teaching, *first*, emphasize the psychologic point of view,[3] which considers not only the

[1] Klein, p. 439.
[2] *Ibid.*, p. 442.
[3] *Ibid.*, p. 435.

subject-matter, but also the pupil, and insists upon a very concrete presentation in the first stages of instruction, followed by a gradual introduction of the logical element; *second*, call for a better selection of the material from the viewpoint of instruction as a whole; *third*, insist on a closer alignment with practical applications; *fourth*, encourage the fusion of plane and solid geometry, and of arithmetic and geometry.[1] The *Lehrbuch der Mathematik nach modernen Grundsätzen* by Behrendsen and Götting, a secondary-school text published in 1909, carries out Klein's ideas on the teaching of algebra and geometry.

A piece of research of vital importance in the advanced study of geometry is the *Foundations of Geometry*, brought out in 1899 by Professor Hilbert, of Göttingen.[2] Tho widely read by mathematicians, it has exerted no direct influence upon elementary teaching in Germany. It has been felt that this mode of treatment is not suitable for pupils first entering upon demonstrative geometry.

ITALY

Since the unification of Italy, great mathematical activity has existed in that country. Before that event, very different practices in geometrical teaching existed in different parts of the country.[3] In 1868 Cremona and Battaglini were members of a government commission to inquire into the state of geometrical teaching. They found it unsatisfactory, and the number of bad textbooks so great, and so much on the increase, that they recommended for classical schools the adoption of Euclid, an edition of which was brought out by Betti and Brioschi. Later other works of scientific merit replaced Euclid. Cremona's great emphasis upon projective geometry reached from the universities down into secondary schools. A typical work is that of A. Sannia and E. d'Ovidio, 1869, which uses the theory of limits and retains the division of geometry into plane and solid. It stands closer to Euclid than to Legendre. The blending of plane and solid geometry, which received great emphasis in Italy, is typified in the *Elementi di Geometria* of R. de Paolis, 1884.

A very remarkable school came into being in Italy, the purpose of which is to render geometry still more rigorous than in the Euclidian text. Starting with a single basic concept—the point—all other concepts are to be logically developed. This movement is typified in the works of G. Veronese.[4] Of elementary works he has prepared *Nozioni Elementari di Geometria Intuitiva*, 1902, and *Elementi di Geometria*, 1904, the first of these being a propædeutic work. Demonstrative geometry is taken up in Italy with older pupils than in Germany and the United States; hence works of greater rigor can be used. Veronese endeavors to state

[1] Klein, p. 437.

[2] D. Hilbert, "Grundlagen der Geometrie" in *Festschrift zur Feier der Enthüllung des Gauss-Weber-Denkmals in Göttingen*, Leipzig, 1899.

[3] Simon, p. 43.

[4] Klein, p. 482.

all the necessary postulates of geometry, no matter how obvious, as for instance, "There exist *different* points," to make it plain that we do not consider a geometry in which only one point exists.[1] As regards the selection of material, Veronese confines himself mainly to that of Euclid, thus receding from the tendency of the school of Cremona. He avoids all fusion with arithmetic. Somewhat similar in character is the *Elementi di Geometria* of F. Enriques and U. Amaldi, 1905.

The effort at rigor, due to Veronese, has been intensified in the great school of Peano, which endeavors to eliminate all intuition. It seems that this school has influenced even elementary instruction and the teaching in technical schools.[2] This recent Italian emphasis upon extreme rigor has led to deplorable results with the less gifted pupils, and a reaction appears to be setting in. Under the leadership of Loria and Vailati a movement is on foot favoring greater emphasis upon intuition, the introduction of some modern geometrical notions, the fusion of geometry with arithmetic, and the concession to the demands for practical applications made by this age of industrial development. In fact, Italy is entering upon a reform much like that of Germany and France.[3]

ENGLAND

Roger Bacon says that toward the close of the thirteenth century the definitions and a few of the theorems in geometry were studied by some pupils at Oxford.[4] About 1570 Sir Henry Savile began to lecture at Oxford on Greek geometry, and in 1619 Briggs at Cambridge on Euclid. In 1665 Isaac Barrow at Cambridge prepared a complete edition of Euclid, which was the standard for fifty years. Gow says that "the seventy years or so, from 1660 to 1730, when Wallis and Halley were professors at Oxford, Barrow and Newton at Cambridge, were the period during which the study of Greek geometry was at its height in England."[5] In 1703, William Whiston became the successor of Newton at Cambridge. He brought out an edition of Tacquet's Euclid. Robert Simson's edition of Euclid first appeared in 1756. Simson was professor of mathematics at the University of Glasgow. In the universities of Great Britain, Euclid met with no competition. Ward's *Young Mathematician's Guide*, 1707, may have been used to some extent, but probably more for its arithmetic and algebra than for its geometry. Practical men, holding positions as excise officers, had to be familiar with practical geometry. For them practical treatises existed, some of which gave explanations of the slide rule. A departure from Euclidian rigor might be expected in the education of men for the army or navy. We have seen that Kästner criticized the French

[1] Klein., p. 483. [2] *Ibid.*, p. 486.

[3] For additional details see W. Lietzmann's article in Schotten's *Zeitschrift*, Vol. XXXIX, pp. 177–91; Vol. XL, pp. 227–28.

[4] Ball, *Mathematics at Cambridge* (1889), p. 3.

[5] Gow, *History of Greek Geometry* (Cambridge, 1884), p. 208.

for making mathematics easy for men interested in war. England has had since 1722 an academy at Portsmouth where men spent one or two years studying navigation, drawing, etc. England has had also, since 1741, a military academy at Woolwich, where sons of noblemen and military officers were taught fortification, gunnery, and mathematics. Among the mathematical professors at Woolwich, during the eighteenth century, were Thomas Simpson, John Bonnycastle, and Charles Hutton, all three authors of textbooks, including geometries. Hutton's works went thru several editions in the first half of the nineteenth century. From this it is evident that Euclid did not hold universal sway in England. Yet the forces opposing him were utterly unable to dislodge him.

In 1822, Sir David Brewster brought out an English translation of Legendre's geometry. Did teachers rally in favor of the introduction of this text? We shall see that De Morgan suggested the use of some parts of it on solid geometry; De Morgan deplored that solid geometry was seldom or never taught before trigonometry. But otherwise we are not able to find any serious reference to this translation of Legendre.

During the second half of the eighteenth century England had come to be the only country where Euclid was practically the only geometrical text used. During the eighteenth century the average age of Freshmen in the English universities was gradually increasing and, perhaps at this time, Euclid passed from the universities to the lower schools. There is no explicit proof, however, that in the great "public schools" Euclid was studied before the nineteenth century.[1]

Very recently[2] some interesting information has been published about one of the "public schools"—Christ Hospital—which paid more than usual attention to mathematics in the courses for boys preparing to enter the royal navy. It seems that as early as 1680 such boys were required to study the earliest parts of the first book of Euclid, the 10th, 11th, and 12th propositions of the sixth book, and to learn arithmetic. Perhaps this represented all the theoretical mathematics taught, for Sir Isaac Newton, whose advice about changes in the course was sought, notes the following omissions: There was no "symbolic arithmetic," no "taking of heights and distances and measuring of planes and solids," no "spherical trigonometry," nothing of "Mercator's chart." In other public schools probably no courses in geometry were given during the eighteenth century. Says Stamper: "It was not until about the middle of the nineteenth century that the study of Euclid became common in the secondary schools of England."

It would be instructive to secure more information explaining how it was possible for Euclid to maintain its supremacy as a text when geometry was being transferred from the universities to the schools. What were

[1] Stamper, p. 88.

[2] "A School Course in Mathematics in the XVII Century" by W. W. R. Ball in the *Mathematical Gazette*, Vol. V (1910), Part I, pp. 202–5.

the experiences of teachers in secondary schools with the Euclidian text? The desirability of modifying Euclid must have arisen early, for in 1795 John Playfair brought out a revised Euclid containing the first six books and adding the computation of π and a book on solid geometry drawn from modern sources. Playfair endeavored to give the geometry a form which would render it more useful. Euclid's fifth book, which had never been used successfully with beginners in geometry, as far as we can ascertain, was modified by Playfair by replacing Euclid's prolix explanations by the more concise language of algebra. But Playfair did not try to change the nature of the reasoning. Had there been a strong movement against Euclid in England at this time, Playfair would probably have joined it. In his review of Leslie's *Geometry* in the *Edinburgh Review*, Vol. XX (1812), p. 79, he says: "A question has been sometimes agitated whether it is most advantageous, for the study of geometry, to possess a number of elementary treatises, or to have one standard work, like that of Euclid . . . . the same lessons are not suited to every intellect, and on these accounts it may be of advantage that different elementary texts should exist. We are very much inclined to the latter opinion."

William George Spencer's unique booklet on *Inventional Geometry* was brought out about 1830 or 1835, but "received but little notice" at that time. A noteworthy device for aiding the young mind thru sensuous stimulus was the use of colored diagrams, suggested by Oliver Byrne, in his edition of Euclid, London, 1847. The failure of this book is doubtless due to the want of moderation in the use of colors.

The ablest writer on the teaching of elementary geometry, during the first half of the nineteenth century in England, was Augustus De Morgan. His articles published in the *Quarterly Journal of Education*, in 1831, 1832, and 1833, display a pedagogical insight which would have prevented many calamities in English teaching, had his views been more promptly and widely accepted. Elsewhere we quoted De Morgan's remarks on Williamson's criticism of Clairaut's geometry, which showed that De Morgan firmly believed in a preliminary course in geometry, as an introduction to a logical course like that of Euclid. It will appear that England was the last country actually to introduce propædeutic courses in elementary instruction.

De Morgan did not hesitate to recommend radical changes in Euclid. Here is what he said in 1831 in an article in the *Quarterly Journal of Education* entitled "On Mathematical Instruction":

> With regard to the fifth book of the *Elements*, we recommend the teacher to substitute for it the common arithmetical notions of proportion. Admitting that this is not so exact as the method of Euclid, still, a less rigorous but intelligible process is better than a perfect method which cannot be understood by the great majority of learners. The sixth book would thus become perfectly intelligible.

Two years later, in an article in the same journal "On the Methods of Teaching the Elements of Geometry," De Morgan dares to suggest

that certain parts of Legendre might be profitably substituted for parts of Euclid. "The eleventh book of Euclid may, in our opinion, be abandoned with advantage in favor of more modern works on solid geometry, particularly that of Legendre, which the English reader will find in Sir David Brewster's translation." In the same article De Morgan gives utterance to a difficulty experienced by young students, which has been referred to by many writers in different countries, the *reductio ad absurdum*. De Morgan says: "The most serious embarrassment in the purely reasoning part is the *reductio ad absurdum*, or indirect demonstration. This form of argument is generally the last to be clearly understood, though it occurs almost on the threshold of the *Elements*. We may find the key to the difficulty in the confined ideas which prevail on the modes of speech there employed." As regards the difficult fifth book, De Morgan said, in 1833, "We would say to all, teach the fifth book, *if you can;* but we would have all remember that there is an *if*." In another place he adds: "We strongly suspect that Euclid, as studied, does as much harm as good." To the credit of teachers be it said, that the fifth book was quite generally omitted. But De Morgan's activity in this line did not end here. In 1836 he published *The Connexion of Number and Magnitude; An Attempt to Explain the Fifth Book of Euclid*. For fifty years this tract was not duly appreciated; later it began to wield a wide influence; it is on this tract that the substitute for the fifth book given in the *Syllabus* of the Association for the Improvement of Geometrical Teaching is modeled; it is on this tract that the revised fifth book in the more recent editions of Euclid by Nixon and by Hall and Stevens is based.

The need of modifying the text of Euclid is brought out by De Morgan in the *Companion to the British Almanac* of 1849, p. 20, as follows: "If the study of Euclid has been almost abandoned on the continent, and has declined in England, it is because his more ardent admirers have insisted on regarding the accidents of his position as laws of the science."

How little influence De Morgan's views wielded in England before about 1870 as regards the revision of Euclid's fifth book and the study of solid geometry, appears from the fact that the most popular edition of Euclid for many years was the one brought out in 1862 by Todhunter. This author reproduces Simson's text, tho he greatly assists the pupil in overcoming the difficulties by breaking up the demonstrations into their constituent parts. In an appendix are given notes, supplementary propositions, and original exercises. Todhunter was quite out of sympathy with the purposes of the Association for the Improvement of Geometrical Teaching.[1]

Opponents of Euclid existed in England at all times. Thus in 1860 W. D. Cooley brought out a rival text. Eleven years later he expressed himself regarding this venture as follows:[2]

[1] See *Conflict of Studies*, by Todhunter, London, 1873.
[2] *Nature*, Vol. IV (1871), p. 486.

In 1860 there was published for me, by Messrs. Williams and Norgate, a little volume entitled, *The Elements of Geometry Simplified and Explained*, adapted to the system of empirical proof, and of exhibiting the truth of theorems by means of figures cut in paper. It contains in 35 theorems the quintessence of Euclid's first six books, together with a supplement not in Euclid. There was no gap in the sequence or chain of reasoning, yet the 32d and 47th propositions of Euclid were, respectively, the 3d and 17th of my series. This book proved a failure, for which several reasons might be given, but it will be sufficient here to state but one, namely, that it came forth ten years before its time.

The reformers found a champion in Sylvester, who, in 1869, before Section A of the British Association, exclaimed:

> I should rejoice to see mathematics taught with that life and animation which the presence and example of her young and buoyant sister (natural science) could not fail to impart, short roads preferred to long ones, Euclid honorably shelved, or buried "deeper than e'er plummet sounded" out of the schoolboy's reach. . . . .

The reform forces finally organized themselves, in 1871, into the "Association for the Improvement of Geometrical Teaching" (A.I.G.T.).

It is a curious circumstance that England's great mathematician, Arthur Cayley, opposed this reform movement. His admiration for Euclid was so ardent that he even expressed a preference for the original treatise without Simson's additions. In the opinion of Langley, Cayley "overshot the mark and his opposition told in favor of the Association."[1]

The second *Report* of the A.I.G.T. recommended practical exercises in geometrical construction, easy originals, and numerical examples. Two years were given to the preparation of the *Geometrical Syllabus* on proportion. A double syllabus was prepared: A *Syllabus on Geometric Constructions*, and a *Syllabus on Plane Geometry*. Most of De Morgan's suggestions[2] on the revision of the fifth book of Euclid were adopted.

This society, after long labors, finally issued a substitute text, *The Elements of Plane Geometry*. This was not used at home, but was used with success in the British colonies. Klein expresses himself as follows in regard to it:

> This is essentially merely a smoothed-down and polished presentation of the first six books of Euclid's elements; thus the rough places at the beginning of the first book . . . . are removed by a consistent use of the concept of motion, but in general the sequence and the contents of Euclid are adhered to, in deference to the examinations. It is therefore only a tame reform, that is here attempted; nevertheless, it has met with sharp opposition by the adherents of the old English system. As proof of this, I refer to an amusingly written book of Dodgson, *Euclid and His Modern Rivals*.

Here Euclid comes out victorious, and all reformers, particularly Legendre and members of the A.I.G.T., are put to rout. J. M. Wilson's *Elementary Geometry*, 1st edition, 1869, came in for a large share of the criticism. At Oxford, where Dodgson had given instruction in geometry for many years, this same Wilson had, at one time, read a critical paper before the

[1] *Fifth Report* of the A.I.G.T., p. 21.

[2] *Companion to the British Almanac*, 1849, pp. 5–20.

Mathematical Society, on "Euclid as a Textbook of Elementary Geometry." Wilson was a prime mover in the organization of the A.I.G.T.

Since about 1870, many editions of Euclid have been printed containing revisions with the object of better adapting Euclid to school use. They exhibit all possible gradations of departure from the original text. There appeared sequels to Euclid like that of F. Casey. Professor Klein expresses himself in regard to these as follows: "The necessity has been felt to consider modern research, going beyond Euclid; this has been done by pressing it by force into the rigid Euclidian form, whereby a good part of the modern spirit is, of course, lost."[1]

During thirty years the A.I.G.T. appeared to have accomplished comparatively little. It had secured the concession that proofs different from Euclid's shall be accepted in examinations and had brought about a sentiment favoring some modification and enrichment of the Euclidian text. In reality, it had accomplished much more, for it had prepared the way for the great agitation of 1901, known as the Perry Movement, which called for a complete divorce from Euclid. The discussion of the teaching of mathematics at the Glasgow meeting of the British Association marks an epoch. The following are suggestions and criticisms that were contained in Perry's *Syllabus*.[2]

1. Experimental geometry and practical mensuration to precede demonstrative geometry. Use of squared paper. Rough guessing at lengths and weights to be encouraged.

2. Some deductive reasoning to accompany experimental geometry.

3. More emphasis on solid geometry; this subject has been postponed too long.

4. Adoption of co-ordinate representation in space.

5. The introduction of trigonometric functions in the study of geometry.

6. Emphasis upon the utilitarian parts of the subject.

7. Examinations conducted by any other examiner than the pupil's teacher are imperfect examinations.

In criticism of previous practices, Perry held that a boy should be educated thru the experiences he already possesses, and should be allowed to assume the truth of many propositions. He held that the teacher must recognize that boys take unkindly to abstract reasoning. He criticized Oxford because, for the pass degree there, two books of Euclid must be memorized, even including the lettering of figures, no original exercises being required. In the discussion that followed, all favored the preliminary experimental course and some advocated a second experimental course to accompany Euclid. Hudson and Forsyth still believed in maintaining the Euclidian sequence of theorems. Minchin

[1] Klein, p. 447.

[2] *Discussion on the Teaching of Mathematics*, edited by John Perry (1901), p. 97.

declared Euclid's order bad. S. P. Thompson and MacMahon favored the retention of Euclid. Miall did not see why we should have a recognized geometry any more than one arithmetic, or one trigonometry. Minchin, Magnus, Pressland, Workman, and Lamb declared themselves against Euclid as a textbook.

The immediate result of Perry's address of 1900, at Glasgow, was the appointment of two committees, one of the British Association and the other of the Mathematical Association. The former committee confined its work to the more general aspects of geometrical teaching. The latter, which was composed mainly of schoolmasters, formulated a set of detailed recommendations, which were published in the *Mathematical Gazette* of May, 1902. They include an experimental introductory course, requiring the use of instruments, practical measurement, and numerical work. In the formal study of geometry is recommended the retention of Euclid as a framework, the admission of hypothetical constructions, definitions not to be taught *en bloc*, the omission of incommensurables in the ordinary school course, and the use of algebra in the treatment of areas.

The Perry laboratory method has led to the preparation of some severely practical works, but as Lodge says, Perry "overemphasized fact divorced from principles." A middle ground has met with greater favor. The plans recommended by the Mathematical Association have been embodied very successfully by Godfrey and Siddons in a textbook entitled *Elementary Geometry, Practical and Theoretical* (Cambridge University Press, 1904). The recommendations of the Mathematical Association have met with favor among teachers, and the general effect has been beneficial. A circular issued in 1908–9, by the Board of Education, on *The Teaching of Geometry and Graphic Algebra*, showed the wide departure made since the beginning of the twentieth century. We quote two sentences: "Axioms and postulates should not be learnt or even mentioned." "It should be frankly recognized that unless the power of doing riders has been developed, the study of the subject is a failure."[1]

The greatest obstacle to reform in England has been the system of examinations. After thirty years of failures the Mathematical Association, at last, has been remarkably successful in persuading examining bodies to give up their insistence upon Euclid, and now Euclid's proofs and arrangement are no longer required by the universities. "Any proof of a proposition will be accepted which appears to the examiners to form a part of a logical order of treatment."

THE UNITED STATES OF AMERICA

During the seventeenth century, arithmetic and geometry received some attention in the last year of the college course at Harvard College. In 1726 Alsted's *Geometry* is mentioned as a textbook studied by Harvard

[1] *Nature*, Vol. LXXX (1909, May 27), p. 374.

seniors, but as soon as geometry came to receive serious attention in American colleges, Euclid became the text used. The first mention of Euclid that we have seen at Yale is in 1733; at Harvard, in 1737. In the latter part of the eighteenth century, geometry was taught to lower classmen. According to a member of the Harvard class of 1798, "the Sophomore year gave us Euclid to measure our strength." In 1801 Professor Webber said, "A tutor teaches in Harvard College Playfair's *Elements of Geometry*."

In 1813 the "Analytical Society" was formed at Cambridge, in England, which aimed to encourage in Britain the vigorous study of French higher mathematics. The influence of this movement reached the United States. In about ten years American teachers began to adopt French texts. Collateral events at West Point had the same tendency. There elementary mathematics was taught from 1808 to 1810 by F. R. Hassler, who was a graduate of the University of Berne, in Switzerland. In 1817 Crozet, of the Polytechnic School in Paris, introduced descriptive geometry into West Point.

In 1819 John Farrar, of Harvard, brought out a translation of Legendre's *Geometry*, which, with translations made by him of other French and Swiss texts on mathematics, were at once widely adopted in the leading American colleges. American teachers were willing to turn to the French, not only for works on the calculus and celestial mechanics, but also for books on elementary mathematics. So it came about that Euclid was replaced by Legendre. In 1828 Charles Davies, professor at West Point, brought out an edition of Brewster's translation of Legendre's *Geometry*. Davies did not enunciate propositions with reference to and by the aid of the particular diagram used for the demonstration, and to that extent returned to the method of Euclid. Davies' edition became widely popular under the name of "Davies–Legendre," and was much used in the United States as late as the '70's.

One of the earliest American geometries worthy of note was that of Benjamin Peirce. The Harvard catalog of 1838 announces that Freshmen take Peirce's *Geometry*. Peirce favored the use of infinitesimals and also the use of the term *directions*—a concept probably first used in this country by a Harvard teacher named Hayward in his geometry of 1829. Peirce's text did not become widely popular, for, like his other elementary books, it was too condensed for immature students. In 1843 or 1844, Harvard first made geometry a requirement for admission to college.

In 1851 Professor Elias Loomis, of Yale, issued a geometry which was revised in 1871. Loomis came under French influences as a student in Paris. In the second edition of his text he says: "The present volume follows substantially the order of Blanchet's Legendre, while the form of the demonstrations is modeled after the more logical method of Euclid." It has been said of American writers, that while they have given up Euclid, they have modified Legendre's *Geometry* so as to make it resemble

Euclid as much as possible. This applies to Loomis with greater force perhaps than to any other author.

In 1871 Professor Olney, of the University of Michigan, published a geometry under two main heads:

I. *Special or Elementary Geometry*, comprising (1) Empirical Geometry, (2) Demonstrative Geometry, (3) Original Exercises in the Application of Algebra to Geometry, (4) Trigonometry.

II. *General Geometry* (Plane Loci).

Olney was a self-educated man. He was a great teacher and had original ideas about teaching. It is said that he was prevented by his publishers from departing very far from the traditional classification. His ideas were novel and forecasted in many ways the present tendencies in mathematical teaching. His geometry shows that he attempted to correlate the various mathematical topics and to introduce applications to everyday affairs. Olney's books were used quite extensively in the Middle West, but acquired no firm foothold in the East.

Just before the death of William Chauvenet, in 1870, appeared his geometry, the only elementary book he wrote. Closely following French models, exhibiting a wonderful ease and grace of style, Chauvenet produced a remarkable book, which was used in many of the best schools. He included as a part of the work, an introduction to modern geometry. Perhaps no work on geometry ever published in the United States has been so highly respected as this.

In 1878 appeared the geometry of G. A. Wentworth, which is still in use. We omit all discussion of it, as also of later books which have been published in this country. Likewise, we omit all discussion of various methods of presentations now being tried in this country, in particular the experiments in teaching algebra and geometry in parallel courses.

The researches on non-Euclidian geometry, begun in the eighteenth century in Italy and Germany, and brought to fruition in the early part of the nineteenth century, did not produce appreciable effect upon the teaching of elementary geometry until the last quarter of the nineteenth century. It was 1867 and 1868 that Baltzer, Battaglini, Grunert, and Hoüel brought Bolyai and Lobatchevsky to the attention of the mathematical public at large.

The new ideas have not affected the teaching of elementary geometry except in some of the definitions and postulates. They have assisted in the rejection of the definitions, "parallel lines are lines everywhere equally distant," and "parallel lines are straight lines which have the same direction." They have shown the futility of "proving" the parallel-postulate and have led to the use of the word "axiom," not as a "self-evident truth," but as a synonym for "postulate."

In conclusion, we note, that, with the beginning of the twentieth century, England began once more to influence the teaching of geometry in

the United States, thru the so-called "Perry Movement," and that Germany, which at no time during the nineteenth century affected geometrical teaching in America, makes itself felt at the present time thru the pupils of Klein and Hilbert and thru the international movement toward reform in the teaching of mathematics, headed by Klein.

[The remaining sections of this report will be printed next year, when it will be presented in serial form. Copies of the complete preliminary report may be obtained from the chairman.]

COMMENTS ON THE REPORT BY THE CHAIRMAN

In presenting the report, the chairman, Professor H. E. Slaught, of the University of Chicago, occupied an hour in elucidating its salient features, now commenting upon the spirit in which the committee had labored, now quoting some important passage in the report, now emphasizing the principles upon which the report was based.

In the historical introduction by Professor Florian Cajori he pointed out the ever recurring "see-saw" between the strictly logical presentation as represented by Euclid and the more intuitive form which makes greater use of concrete material. On the intuitive and concrete side being Clairaut, De Morgan, D'Alembert, Lacroix, Legendre in the earlier editions, Klein, Kambly, Lübsen, Loria, Vailati, Sylvester, Perry, and many others; while on the side of greater rigor are Williamson, Méray, Hilbert, Cremona, Veronese, Peano, and others. On the whole the balance of emphasis in the historical retrospect seems to be the recurring desire to attach the geometrical teaching to the concrete as much as possible and to encourage a large number of assumptions and much recourse to intuition, especially in courses intended for young pupils corresponding to our tenth grade. The committee has endeavored to present a sane and conservative view with respect to both the concrete and the theoretical aspects of geometry. In this spirit it has devoted a section to the logical aspects of the subjects, including a discussion of axioms, postulates, definitions, informal or intuitive proofs, the place of geometry in the curriculum and the claims for the study of geometry as a disciplinary subject. On the other hand, a section is devoted to exercises and applications, in which are considered the distribution, grading, and nature of exercises, the sources of concrete problems, the importance of problems involving loci and the use of algebraic methods in geometry. There is also a section in which a strong recommendation is made for concrete and constructive geometry in the grades.

All this is subordinate to the syllabus itself, which the chairman proceeded to explain in detail. The underlying principle in the syllabus is the attempt to secure emphasis and perspective for both pupil and teacher. In the maze of theorems as usually given, all on a dead level of importance, both in textbooks and in existing syllabi in this country, it is difficult for the beginner to find any guideposts or to detect any mountain peaks in the landscape. The arrangement of the syllabus and the use of varying grades of type will serve, it is hoped, to lay emphasis upon a certain number of fundamental theorems and to place the rest in such gradations of importance as to materially assist the student in gaining control of the subject.

The committee believes that two important ends will be secured by this arrangement of the theorems for emphasis: First, "it is a fundamental characteristic of the human mind from which there is no escape that any clear impression of a vast field must have exactly such distinctions as are here made for geometry." The teacher needs this perspective in planning the course and in the daily recitations. The pupil needs this assistance in properly orienting the subject in his mind both as he proceeds and especially when he is reviewing a topic or a book or the course as a whole.

But secondly, and less important, is the fact that this arrangement for emphasis will enable a class more quickly to gain a comprehensive grasp of the subject, and will then leave more time for exercises and concrete applications. Indeed, the arrangement itself will contribute directly to this end, since, in very large measure, those very theorems which are fundamental in the chain of logic are also of fundamental importance in the application of geometry.

DISCUSSION

G. Irving Gavett, assistant professor of mathematics, University of Washington, Seattle, Wash.—Those of us who have studied this report must appreciate the vast amount of work done by our committee. Teachers in both high school and college must realize the necessity for some sort of co-ordination and systemization of the work, not only in geometry, but also in algebra and even in arithmetic, in order to accomplish the true purpose of mathematical training. It seems to me that the recent tendencies, whatever they are, in the teaching of mathematics, do not give the results that should be expected either in training or in actual facts acquired. How many of our high-school graduates have been taught to *think?* Not very many of them that come to us in the colleges of liberal arts and the professional schools. Business men claim that not many come their way. If there is any one thing our high schools should do for our young men and young women, it is to train them in thinking clearly. If there is any one subject that ought to give a man mental discipline and a thoro training in how to think, that subject is geometry.

There are other things that train the eye, the ear, the hand, and give a full storehouse of valuable facts, both utilitarian and cultural. With all this training and acquisition of facts, if the student has not been set on the road to clear thinking we have failed in our purpose. I think no one in this Round Table will deny to geometry its power to train in clear thinking.

Section *A*, of the report of our committee, is a historical résumé of the attempts made during the last two centuries to reform the teaching of geometry in France, Germany, Italy, England, and the United States. In this excellent Introduction we follow the attacks on the pure formalism of Euclid up to the Perry movement of "complete divorce from Euclid" and the effects of modern mathematics on geometry. In order to understand the present situation it would be well to study this Introduction.

In the last section, *E*, is the syllabus itself as suggested by the committee. This list of theorems on plane geometry and solid geometry is arranged according to emphasis. For plane geometry there are fifteen groups of theorems and six groups for solid geometry. In these groups certain basal or fundamental theorems are printed in black-face type. These are regarded as of major importance and may form a nucleus upon which the whole geometry depends. Of next importance are those printed in italics. Then come theorems in roman type and lastly the least important in small type. As stated in the report, this list is not exhaustive, neither is there any intention to insist on the order as given. Probably there never could be any complete agreement as to just what theorems should be omitted, which ones should be regarded as fundamental and what should be the logical order.

It is an important point in the syllabus that the student is to be made to see that there are certain basal theorems and that on these he can hang the whole subject. He is led to reason from the fundamental and to classify his knowledge in an orderly manner. He learns to look for the consequences that follow from knowledge already gained.

In this part of the report considerable emphasis is placed on informal proofs and the dispensing with the formalities of logic in demonstrations. Here, I think, the teacher will have to be on his guard lest in admitting the informal the formal be crowded out to such an extent that the student loses much of the training in accurate thinking which

geometry is to give him. We must not let the student acquire slipshod habits of thought. I think nothing is farther from the purpose of the committee than that the student should become careless in his reasoning. Still some teachers are as anxious to travel the broad and easy way as are their pupils, and need only the suggestion to try to make geometry easy play. Such should not fail to note "(*d*) Dangers," on p. 34 of Section *B* of the report.

Section *B* takes up logical considerations. A general list of axioms, postulates, or assumptions is given. It is not claimed that this list is exact and the particular forms of statement are not insisted upon. The important point is that it is a general list needed by the beginner in geometry and is not reduced to a minimum number of necessary assumptions along the line of Hilbert. To those who have read Hilbert and have taught elementary geometry I think the wisdom of this course is self-evident.

There is one point in the Summary, on p. 29, that I would criticize. That is putting $\sqrt{a}=\sqrt{b}$ instead of $\sqrt{a}=\pm\sqrt{b}$ altho it has been previously stated that positive quantities are understood. The existence of more than one root has already been seen in algebra. I believe the student should constantly bear in mind all possible roots and be taught to select only those which fit the case in hand. The evil of any other teaching is met with nearly every day in more advanced classses. A form which leads to error develops a faulty reasoning power and lack of carefulness.

Under "Definitions" attention is called to certain elementary concepts which the teacher should make sure are explained and understood rather than exactly defined. It is recommended that new terms be taught when the time arrives for using them. It is also thought that elaborate systems of symbols should be avoided. All of these recommendations I believe are good.

As to the treatment of limits and incommensurables I must demur. It is undoubtedly true that in many cases this subject is not sufficiently understood and that often the presentation is not scientifically sound. I fail to see how a less formal presentation will make it better understood unless it is followed by a formal presentation. The second objection will certainly be removed by giving a treatment which is scientifically sound. No other treatment should be allowed.

The subject of incommensurables and limits is bound to come up. In fact it does come up in the syllabus as presented. No one can deny the importance of this subject in mathematics. If the student is to go on with his study, he must master this subject. If he is to go no farther, he should be permitted to gain the power and the point of view offered by a scientific treatment of variables approaching limits. All have to deal with variables. Variables are sure to present incommensurability. When the subject is presented scientifically sound in a clear manner, it is easily within the grasp of the ordinary student. When he has grasped it, he has gained a power of argument which he can obtain in no other way of which I know.

Under "Time and Place in the Curriculum," the committee suggests provision for inductive, constructive, observational work in geometry in the elementary grades, and to precede plane geometry by work in geometric drawing. Such a course may be made excellent. The pupil becomes familiar with the general facts of geometry and with the handling of tools for geometric construction. This leaves him free to put his thought on the more formal side and develop logical deduction from familiar forms.

On pp. 37 and 38 the report takes up "Purpose in the Study of Geometry." Here is where we will have to be careful. There are widely varying opinions on this subject. We find the advocate of pure formalism who would use Euclid and nothing but Euclid. On the other hand there are some pedagogists who claim no disciplinary value for geometry and propose to make it purely utilitarian. Between these extremes are all grades. In (*b*) and (*c*) of these pages of the report are some exellent statements. Both extremes are disapproved. The committee feels that the formal side should not suffer and that geometry is not lacking in disciplinary value. It is also stated that formal treatment is necessary for further study of mathematics and that it has genuine cultural value. I

would add that it is also necessary for a proper training of the reasoning powers of those who do not intend to pursue mathematical subjects further. The committee states that a judicious fusion of theoretical and applied work, free from radicalism in either direction, is necessary. I wish there were some way to make certain to every teacher of geometry just what a *judicious* fusion really is. As stated, it must be dictated by common-sense. But alas, how many different grades of common-sense there are! We must beware of those writers mentioned as well as those teachers who "utterly fail to recognize the fundamental significance of mathematics in either its intellectual or its material bearing."

After this excellent stand, I am sorry to see an apparent retreat in "(*d*) Claims for Geometry," p. 38. It is emphasized that geometry is taught first for *pleasure* and second for *profit*, seeming to forget entirely its *disciplinary* value. Let us rather say: first, for *discipline*, the real work of geometry in developing the growing mind and producing a capacity for logical thought, reasoning power; second, for *profit*, bringing out the utilitarian side on applications to everyday life, to trades and professions, and to sciences; third, for *pleasure*, which always follows successful accomplishment of any work or overcoming of any difficulty. If geometry is properly presented, pleasure will come of itself. We will not have to seek it. The student will see the beauty of the subject and a desire for further accomplishment and progress will be aroused. I am sorry to see *pleasure* put first because I feel that there is evil in the recent tendencies to make play out of work. The high-school student is at a formative age when he should be and can be taught to do real work. When we get these same students in college we find at once the difference between the one taught to work and the one taught to play. Ask the man out in the world and he will tell you the same about the young men and women that come to him. Our schools fail if we do not teach habits of work. Geometry gives the great opportunity to acquire capacity for work thru the mental discipline of accurate thought and clear reasoning. It still remains true that there is no royal road to geometry.

Section *C* treats of special courses for various classes of students. The committee is probably wise in not attempting to outline such courses. The desirability of preliminary courses in the graded schools is emphasized. The control of geometric forms is a need in everyday life. Such control is sadly lacking in many an otherwise educated person. The great majority of public-school pupils never get beyond the grades. There, then, is the place to become acquainted with and see the relations between geometric forms, to learn geometric constructions and the handling of simple instruments. This will leave more time for the purely formal side of geometry in the high school, and the mind of the pupil will be free to take up the logical point of view.

In section *D* exercises and problems are considered, the committee recommends a presentation in which the more difficult exercises are either postponed to a later part of the course, or omitted altogether, while the easier ones are brought into more immediate connection with the theorems to which they belong. This arrangement gives the student a chance to exercise his reasoning power as fast as it is developed. This must necessarily add to his interest. I would not by any means omit the more difficult exercises. They are valuable in giving the student above the average an opportunity to use his greater ability and make still further progress. They serve as a spur to greater accomplishment. We should not plan the course for the *average* student alone.

Problems, it is stated, are of three kinds: (1) those involved in constructions of figures; (2) demonstrations necessary to establish certain relations; (3) problems in computation. Here the utilitarian side of geometry can be introduced freely. Problems both simple and complex can be selected from architecture, industrial products, surveying, designing, etc. Trigonometric functions are introduced, giving an additional source for many useful problems. Beginning on p. 49, a number of very good illustrative problems are given. These and the references to sources of problems together with the ingenuity of the teacher give an abundant supply.

In "Problems Involving Loci," the essential parts of the definition of a locus are

given. It is brought out that some consideration should be given to motion. A "dynamic" element is given to the idea of locus by means of the expression "locus of a point" in addition to the static element of "locus of points." Both ideas should be used to make the pupil familiar with different points of view of the same thing. It is also shown that the idea of motion cultivates space intuition by the concept of functionality. I would call attention to the fact that this may lead at once to use of limits.

As to "Algebraic Methods in Geometry," it is shown that algebraic forms give definiteness and again emphasize functionality. Algebra can be translated into geometry and geometry into algebra. This develops facility and accuracy of expression and gives geometric pictures of algebraic formulas. Geometry and algebra may thus be unified. In the use of algebraic expressions I want to call attention again to the importance of considering all values of a radical expression.

Whether or not this report results in an agreement as to the general method of presenting geometry, one thing seems certain: a careful study of its contents and discussion of its recommendations must result in a better teaching of geometry. Every teacher of geometry should have definite ideas on the manner of presentation. Consideration of this report can hardly do less than set teachers to thinking on the best methods. And when true thinking is done, good must result.

Alva W. Stamper, head of the Department of Mathematics, State Normal School, Chico, Cal.—One presumes a great deal in attempting to criticize this report, especially when the time the committee has given to its preparation, the personnel of the committee, and the great work evidenced by the report itself are considered. While the committee naturally desires adverse criticisms, one is forced to confine his remarks almost entirely to the favorable aspects of the report.

The report of the committee, including the syllabus, should be of great value to the teacher of geometry in standardizing for him the educational aims and values that enter into the teaching of geometry. Especially valuable should be the report to the prospective teacher of geometry, where, in his university course in mathematical education—and such a course is not yet sufficiently common in our higher institutions—he gains a perspective that is invaluable. The syllabus prepared by the committee in its report will be especially welcomed by those teachers who prefer to teach from a syllabus rather than from a text. There are certain pedagogical dangers in trying to follow at the same time the plan of a text and the recommendations of a committee. Yet the syllabus outlined by the committee lays no claim to be logically arranged. Definitions are not even prescribed. From these considerations we judge that the teacher is expected to use any text, using the syllabus as a corrective.

One feature of the syllabus appeals to me as especially valuable to the teacher of geometry. I refer to the grading of propositions according to their degrees of importance. Teachers are often prone to teach all theorems and problems as tho they were equally important. The plan of emphasizing the essential and subordinating the less essential has in recent years worked important reforms in the teaching of arithmetic. The efforts of the committee, followed up by the active carrying out of this principle by the teachers thruout the country, should bring about important changes in the teaching of geometry. A recommendation of almost equal importance is that many of the less important theorems should be informally proved.

The freedom left the teacher is particularly noticeable in the report of the committee. Perhaps no higher compliment could be paid the teachers of the country than the one indirectly expressed by the committee in refraining from stating their conclusions dogmatically.

The committee has been far-seeing in eliminating certain historic landmarks from the geometry of the secondary school. The history of the teaching of elementary geometry tells us that when geometry first began to be taught in the early secondary schools,

from the sixteenth to the eighteenth centuries, it was, for the most part, of a practical nature. With the exception of England and, in a somewhat less degree, Italy, the other European countries did not follow the traditional Euclid. Geometries in common use in those early secondary schools either omitted the incommensurable case, or else paid little attention to it and the theory of limits. Assumptions of theorems commonly proved today were to be found in some of the most important texts. In our own country, the nineteenth century saw a more highly organized system of logic for the young minds of the secondary-school age than was common when geometry first began to be taught below the universities. The committee is certainly wise in omitting the incommensurable case and the theory of limits from the high-school requirements and in recommending the assumption of a relatively large list of preliminary self-evident theorems.

A few questions occur to one after reading the report. I believe that the syllabus should lay greater emphasis on proportion and should give a list of the more important theorems common to both algebra and geometry. While it is granted that most pupils study proportion in their algebra, the need of a review in geometry is necessary. In case algebra and geometry are taught in close connection in the high school, not especially considered by the committee, the case is different.

The committee has suggested that the locus work be based on two conditional statements, not on a system of alternative statements, which is apt to complicate matters. It would seem advisable also to specify that only a few propositions, less than six, need to be proved by basing the proof on the definition of locus. The remaining locus propositions are usually to be proved by making them depend upon these half dozen. I make this suggestion, since it has come to my attention in a number of ways that teachers not uncommonly require pupils to prove all locus theorems by making them depend on the definitions.

Instead of giving type terms to be omitted or used (p. 31 of the report), it would seem better to give lists of the terms the committee has in mind. The committee says to omit terms like *scholium*. The term *scholium* does not suggest to the reader other terms that should be omitted.

Miss Edith Long, Lincoln, Neb., urged on behalf of a growing number of teachers, a consideration of the usefulness of teaching algebra and geometry in correlated parallel courses. Attention was called to the successful pursuit of this plan by the Germans and French. Protest was offered in view of the practical opposition to this plan which many feel that the report at least suggests. Professor Slaught replied that this matter would be considered by the committee, along with other suggestions; but the committee did not feel that this question properly came before them in their work upon a syllabus for geometry.

A. W. Stamper, of Chico, Cal., expressed approval of the central idea dominating the committee in preparing its report. There are certainly parts of geometry of greater importance than others which serve as means for classifying and organizing the complete mass of material. Attention was also called to the value of basing new locus theorems upon simpler locus theorems already established. Should there not be also some suggestion as to the treatment of proportion?

A. Grant, of Palo Alto, Cal., approved of the idea of emphasizing the figure, or diagram, as well as the verbal, or formal, statement of theorems.

Miss Hewett, of Alameda, Cal., suggested that it is easy to avoid the difficulties of the incommensurable case, by early presenting the idea that in nearly all cases in real life the numbers which we use are only approximations. Pupils are all the while using incommensurables.

Mr. Smith, of Campbell, Cal., said that the committee was right in emphasizing pleasure as of first importance in the study of geometry. Unless the class become interested and find the work a real pleasure, it is not likely to become anything more than a formal, classroom exercise to be forgotten as soon as possible.

Miss Brookman, of Berkeley, Cal., questioned whether there is actual mathematical value in problems that may not conform to real shop conditions. Professor Slaught said there may be a value in many such problems. Principal Westcott, of Chicago, strongly approved the use of such problems. Mr. Arnold, of San Diego, Cal., agreed, illustrating by examples found valuable in actual class use, where they could be seen to have real bearing upon problems of experience. He also suggested the desirability of a wider study and use of ratio and proportion.

Mr. West, of San Diego, Cal., proposed to shorten the course of arithmetic in grammar grades, and to follow it by a correlated elementary course in experimental mathematics, not arithmetic, nor algebra, nor geometry, but just simple, plain mathematics. If you don't put up partitions they need not be taken down.

Mr. Westcott recommended a review, at the end of the high-school course, called arithmetic, which will offer a means of real correlation. Mr. Arnold commended the use of such problems as offer some means of verification.

C. CLASSICAL

LATIN IN THE LOWER GRADES (BELOW THE HIGH SCHOOL)

H. C. NUTTING, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

Under the stress of prescription and other influences, the study of Greek and Latin flourished; but now that the sheltering shade of prescription has been cut away, the burning sun of free election bids fair to destroy in large measure our fast-withering plants. As a partial remedy for this situation, so disheartening and disappointing to those who love and believe in the classics, various changes in methods of instruction have been from time to time proposed. Of these none seems so full of promise as the plan of carrying back the beginnings of Latin into the upper grades of the grammar school, thus allowing a period of two years for the work which the conventional First Latin Book essays (often with indifferent success) to compress into one-half of that time.

It is, of course, the one aim of all methods of elementary Latin instruction to lay a broad and firm foundation for the work of succeeding years; and from this standpoint the advantage, in nearly every particular, lies with the plan of beginning Latin in the grammar school. I say in *nearly* every particular, for there is at least one point on which there might be a difference of opinion. Those teachers, who believe that elementary Latin instruction should deal largely with matters of abstract syntax, would find an average seventh-grade Latin class a disappointing field for their endeavor. This, however, to my mind, is no valid reason for postponing the beginning of Latin until the high school is reached. For, tho the seventh-grade pupil may not have reached the point where he can grapple with abstruse and abstract syntactical problems, he is just at the place where the study of Latin, by crystallizing his hitherto rather inchoate and unclear grammatical notions, is of great and immediate advantage to his English, and prepares the way for later study of other foreign languages. So that, even on the formal grammatical side, I, for one, see a certain advantage in beginning Latin in the seventh grade. But whether or not all share my feeling on this point, surely everyone must agree that the seventh-grade Latin beginner has the advantage in the following fundamental particulars:

1. *Acquisition of the forms of declension and conjugation.*—The student who delays

the beginning of Latin until he reaches high school is very apt to find that the necessary memorizing of paradigms is a tasteless—if not distasteful—task. Many, indeed, never really master the inflectional system; and of those who do, not a few find it distressingly easy to forget what they have learned. Now the pupils who essay this task at an earlier age have a wholly different experience. For a small child to learn paradigms is "fun," and the whole matter may be treated more or less under the guise of a game; and, best of all, what is once so learned is not easily forgotten. The younger the child, the more indelible, apparently, is the impression made upon the mind. The seventh grade, therefore, affords a far better opportunity than the ninth or tenth for laying securely and well this corner-stone of any adequate knowledge of the Latin language.

2. *The acquisition of a working vocabulary.*—Here again the high-school beginner makes a poor showing, and the reason is clear, namely, overcrowding. In the conventional beginners' books the special vocabularies attached to the exercises sometimes run as high as twenty words, thus precipitating a wholly impossible situation; for the teacher can hardly be expected to find time to take up such a list word by word, preparing the student for the work of memorization, and still more hopeless would seem the task of devising some system of review whereby such a rapidly increasing mass of material could be kept fresh in the pupil's mind. It is easy to stand off at a safe distance and criticize; but, when one really faces the situation, the wonder grows, not that the high-school beginner remembers so few words, but that he has gotten anything at all out of the five-minutes-for-lunch program thru which he has been forced. All this is changed for pupils who proceed according to the plan now proposed. It is not essential or desirable that a seventh-grade class should attempt to master a vocabulary of more than four hundred words; and if these are spread along evenly over the approximately two hundred lessons which go to make up the year's work, the average per lesson is hardly more than two words. Here is an entirely possible situation. Taking into account that some words are most easily memorized in one way and some in another, and that not all pupils' minds work in the same way, the teacher will exploit all the means by which a given word might find lodgment in the mind of any, namely, its printed form, its sound when spoken, its etymology, its cognates, a picture of the thing that it represents, etc. And, furthermore, in both oral and written work, the changes can be rung again and again upon the same word; for there is no impeding avalanche of new vocabulary to force the old into the background, until the old has become perfectly familiar to the whole class. Therefore, under this second heading also, namely, the acquisition of a working vocabulary, I feel quite safe in saying that the seventh-grade beginner has a decided advantage.

3. *The acquisition of reading power.*—This is the sorest point of all. Our critics have not been backward in telling us that it is a disgrace that, after four years' study of Latin, the average student has so little power to read the language. And in our own camp the idealists are sighing and longing for classes which shall be able to take up passages of Latin previously unseen, reading them aloud with proper emphasis, taking in the author's meaning word after word, just as it is developed in the text.

In passing, I should like to remind our friends, the idealists, that not a few of the students whose performance in Latin they bewail would make a rather poor showing if called on suddenly for an elegant and discriminating rendering of an unfamiliar passage of English prose. How much greater the difficulty, then, when a piece of Latin previously unseen is set before a high-school student whose hold upon the paradigms is none too firm, and in whose knowledge of vocabulary there are fathomless chasms on all sides.

Here again the seventh-grade beginner has a tremendous advantage. For (*a*) he really knows his forms; (*b*) his vocabulary is small, but it is thoroly mastered; (*c*) he has the whole eighth grade before him to be devoted largely to the business of perfecting his reading power, and he need not be plunged forthwith into some Latin author. This last point is particularly important because there is no Latin author properly graded for rational practice in the art of reading—one sentence is simple, the next complex; one

chapter is easy, the following hard. To secure proper practice the Latin must be largely manufactured, the start being made with the vocabulary and syntax learned in the seventh grade, and then gradually expanding step by step, each lesson being preceded by a preparation covering all the new material incorporated in that lesson. By this process, without the least strain or friction, a class can be brought along to the point where the transition to Cæsar or Nepos is robbed of all its terrors; in fact, a class so trained will attack those authors in somewhat the fashion that our friends, the idealists, have long since been sighing to behold.

To sum up, tho it may be admitted that the seventh grade is a poor field for excursions in abstract syntax, it is undeniably true that the child who begins Latin in that grade and devotes, under proper leadership, two years to the business of laying a foundation, will be found on the average to outclass altogether the high-school beginner in the far weightier matters of knowledge of forms, grasp upon vocabulary, and ability to read the language.

In view of what has already been said, it is perhaps hardly necessary to state specifically that I am a firm believer in old-fashioned thoroness. I advocate beginning Latin in the lower grades, not because I believe that the work so undertaken will prove easier and more attractive (tho there is no doubt that it will so prove), but because I am convinced that, on the average, the foundations of Latin can be laid more firmly and securely in the seventh and eighth grades than in an early year of the high-school course. I have not a shred of sympathy for weak-kneed, wishy-washy, compromising methods. I would not have paradigms put upon the board to be somehow unconsciously absorbed. I would have them learned, well learned, better learned than they are now by high-school beginners. So with the vocabulary and grammar. I firmly believe that we have here an opportunity to train up a new generation of Latin students who will be able to read simple Latin previously unseen *in* Latin and *as* Latin, and who will do much to confound the critics who constantly reproach us with the smallness of the tangible result of our labors. At any rate, the experiment is well worth trying; if it is properly conducted, we surely have nothing to lose; rather we have everything to gain. I, for one, am sufficiently optimistic to believe that our gain will be large.

MAKING LATIN COMPOSITION OF GREATER VALUE

WALTER H. GRAVES, OAKLAND HIGH SCHOOL, OAKLAND, CAL.

When I was asked to take a part in a symposium on Latin composition, I took the value of the subject for granted, and in thinking over what I should present, I found that there were several ways in which I thought that our present work in the subject might be strengthened. Upon seeing the program a couple of days ago, I found that the subject assigned was "The Value of Latin Composition;" what I shall have to say, then, will present some methods of possibly improving our work, and one or two suggestions as to its value.

In the first place let me call attention again to the distinction between our term "Latin composition" and what we really mean by it in practice, namely, the *translation* of English into Latin. Some people would question the value of attempting real composition in our high-school classes; to me it seems that there is a very definite place for it. Real composition work can be begun in the very elementary classes by the reproduction of the work read and by simple question and answer upon it; the dialogs that are given in most of our elementary books offer suggestions of this sort, with the disadvantage that there the answers are already supplied, leaving nothing for original work on the pupil's part.

In the advanced work, as well, the same sort of thing can be done—real composition without any English original. For instance, in reviewing the work in Cæsar, the class may be asked to state in Latin what was the principal achievement of Cæsar's second

campaign in Gaul, or at the end of the Cicero to give a Latin outline of the third Catilinarian oration.

There is a place of course also for the translation work from English into Latin, but it must not be perfunctory, the manual must be merely the basis; the work done in class should be largely extemporaneous, built upon this foundation. There is danger in following the manual too closely; if at any time it is found that the class needs special drill upon certain points, assignment of the special topics should be made and sentences provided by the teacher for that drill.

In presenting their work based upon assigned sentences there is danger that the pupils may memorize their versions of the task, with a large possibility for error in those versions. Memorizing is good—probably we do not demand enough of it in our work—but if the pupils are to memorize anything, let them memorize the text of the author, with the certainty that they are then memorizing good Latin. The next step beyond memorizing is the giving of the story in their own words. As soon as they become used to this they find that it is really easier than the translations of assigned English because they are left entirely to their own choice of what should be said and the form in which it is said. We get of course very simple expressions at first, but there is no harm in this, provided they are giving real Latin. It is easy enough then to suggest combination and subordination of sentences.

By following such a plan we can develop the ability to *present* good Latin thru the stages of memorizing, translating, and finally composing, whether the latter be two words or two pages. We have gone from mere repetition to actual production.

Of the value of our Latin composition, I think it works toward greater ability in reading—reading now being considered the principal end of our Latin work. Three points are here to be mentioned: first, training, drill, even call it formal discipline—altho that term is anathema to many—of a sort entirely different from that gained in reading; second, a control of the forms that helps immensely the reading ability; and finally, a similar control of grammatical principles.

DISCUSSION

F. C. Taylor, Pacific University, Forest Grove, Ore.—The great value of the study of Latin has been its cultural and training effect. If, as there is reason to think, there is a rising interest in classical study among educated people, is it not fair to suppose that the call is for that developing and training of the mind secured by the classical study of the fairly recent past? The experienced and observant want for those in whom they are interested what good they see has been gotten out of Latin study.

In this training process from study of Latin, the set translation of English into Latin with definite points in mind to be illustrated has been a most searching exercise, particularly well calculated for strong mental drill; and a process that would develop, make plain, and fix in mind idioms, inflection, and syntax in a way to be most useful to the student in Latin and any other language he may use.

Our need is not for a new, revolutionary way of coming at classical study. Is it not more reasonable, using oral work, early sight-reading, etc., to relieve monotony and add interest, to press on with enthusiasm along the general lines we have found so valuable? This will include, no doubt, considerable formal prose composition, and if there seems to be somewhat of grind in the process, we may remember it as a necessity to the attendant sharpening.

D. MODERN FOREIGN LANGUAGES

THE FINAL AIM OF MODERN FOREIGN-LANGUAGE STUDY IN SECONDARY EDUCATION

J. HENRY SENGER, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

The introduction of German as an integral part of the culture curriculum of secondary schools may be considered to have begun with the movement to raise the secondary schools to academies not necessarily contiguous to universities and not preparing for the different courses of higher institutions. The gradual neglect of the study of Greek, against which even the best teachers found themselves powerless, made it necessary to utilize the modern languages for more than the utilitarian object which had led to their introduction in our schools.

It is difficult to generalize the cultural effect of the study of languages upon the mass of our students; it is more to the point to state its effect upon individuals and examine how far we can safely apply the case to what a decided majority of scholars may experience whom we subject to the preparatory discipline of the study of a language for the sake of culture of thought and development of character.

I began the study of Latin in the fifth grade of a grammar school with a seven-year course when I was ten years old. No attempt was made to impress me with the beauty of the language and the importance of its literature. We were drilled in the declensions and conjugations as we drill our scholars in spelling; the rules of gender were memorized in rhymes as amusing as Mother Goose's wonderfully true stories; the study of the vocabulary began with a number of the most frequently employed words of ordinary, not necessarily classical, Latin. In this we were also as constantly drilled as we were drilled in our spelling. The vocabulary was systematically enlarged during the first three years of the study of the language. There was no rushing into Caesar with six months' preparation; the readers began with detached sentences; their contents with their short morals, their quaint statements from the realms of history, ancient and mediæval, geography, and manners impressing imperceptibly the mind of the child with a wealth of facts never to be forgotten. At the high school the first authors used were the *Lives* of Cornelius Nepos and the *Fables* of Phaedrus, the latter to be learned by heart in order to be recited complete. After that parts selected from Caesar's *Commentaries* (not the first four books of the Gallic War and considerably less in extent than they) and selection from Ovid's *Metamorphoses*, of which also large passages were memorized. In the same way the study of Latin was continued with Cicero, Virgil, Livy, Sallust, Tacitus, and Horace. I may also mention that during the first three years there was as much translation into Latin as from Latin, and later on there was a well-graded and interesting course of Latin composition which led finally to the translation of contemporary newspaper articles, something of particular interest to all of us.

A year after I had begun the study of Latin, the study of French began. The elementary part of the study did not differ very much from that of the former language. We were drilled in the so-called irregular verbs, I might say, with a sportsmanlike emulation so that there was no doubt of the principal parts of *acquérir* and *s'asseoir*. As we brought a considerable vocabulary to our first French author, Voltaire, his *Charles XII* was really interesting to us.

The next year Greek was begun in the same manner as Latin, made easier than Latin by the acquaintance with the latter's mechanism. Xenophon's *Anabasis* was reached only after a year and a half of elementary study, and Homer six months after that. Our first home lesson in Homer consisted of the first hundred lines of the third book of the *Odyssey*, a task which we did not consider excessive, notwithstanding the fact that we had had no previous acquaintance with Homer's dialect. Our teacher actually succeeded

in having those hundred lines read aloud and translated in the course of one recitation hour.

Let me add that grammatical questions came up in the course of our reading only when called for by an insufficient or faulty translation; the more intricate points of grammar presented themselves quite naturally in the well-graded courses of translation into the foreign idiom.

That I was at an early age impressed with the beauty of thoughts as expressed in the foreign languages, ancient and modern, I attribute in the main to three circumstances: First, the elements of the language had been taught at an age when the kaleidoscopic variety of forms was still amusing and every word seemed to cry out aloud, "Look at me, what part of speech am I, where in the many drawers of your memory do you have to look to find out the meaning of the tail I am dragging behind me?" Thus the translation from and into the new language before me appeared to be as interesting as putting together the parts of a dissected puzzle picture. Secondly, choice language was always insisted upon in the employment of the vernacular for a final translation. Thirdly, the constant and systematic memorizing of choice parts of our reading, when recited, especially by a gifted teacher, seemed to give real life to the thought of the author thru the ever-varying shades of emphasis, which made colors appear where there had before been but a mere pen-and-ink sketch and allowed the mysterious over- and under-tones of the sentence melody to have their silent effect on the ear of the astonished and pleased listener. Thus it was as much a matter of course that the grandest pieces of the different literatures should impress me after my mind had been prepared to submit to their influence as the beauties of nature resistlessly impress the minds of persons whose early surroundings have not stunted their receptivity to the point that they see in a waterfall nothing but a waste of electric power and in the big trees of California a ridiculous conservation of many millions of cubic feet of lumber desirable for the manufacture of lead pencils.

Far be it from me to deprecate the acquirement of the practical use of the principal modern languages taught in our schools; my contention is directed against the merely utilitarian view which appears to be dominating in their teaching; whatever we teach our scholars ought to become a matter of conscious objective consideration on their part. A merely oral method may be of immediate practical results, but its acquisition will neither last nor have any cultural effect upon the language power of the pupil. And that we ought to consider the most important aim of our teaching of foreign languages, viz., the solicitous cultivation of the best English thru the deepened insight into the meaning of the words employed and the critical consideration of the translation finally obtained with regard to the melodious sequence and the proper emphasis of the members of the sentence. A German waiter acquainted with three or more foreign languages has as a rule no conscious knowledge of his mother-tongue and flounders pitifully when beyond the shallow depth covering an area of a few hundred words combined into simple declarative and interrogative sentences only occasionally encumbered by a complex temporal or conditional clause.

On the other hand, it has been an invariable experience not only of myself but also of my colleagues in a very large girls' high school during quite an extended period of service that scholars who at home were using languages other than English, mostly, however, either German or French, or both, had the greatest difficulties in obtaining passable marks in English, tho proficient in all other branches of instruction. Quite natural; they had never been trained to objectivate their home language and subject it to a conscious use, which would have enabled them to observe that the difficulty to be overcome in English was not merely the employment of grammatically correct forms, but the proper regard for rhetorical expediency.

In one particular way I was able to remedy that shortcoming in the case of a boy in whose home a faultless German was spoken. I began with him the study of Latin while he was still in the seventh grade. The success of this attempt subsequently led me to the

conviction that the proper teaching of Latin at an early age as a language-study and not as an introduction to a possible study of the classical writers would present to the youthful mind in their concrete forms logical functions which are not distinguished by form in English and can be discerned only thru abstract reasoning. In fact, correct parsing and its ultimate object seems to be entirely beyond the comprehension of some scholars who reach the university without having been subjected to the discipline of systematic grammar thru the presentation of concrete and differentiated forms conveying the varying aspects of person, number, tense, mood, and voice. And thus I venture from an experience in teaching of many years and from the religious belief that the preservation of our English language in her purity and the organic development of her increasing power ought to affect the orientation of all our studies toward that goal,

1. That the teaching of the critical use of English in the generally too large classes of our schools is materially improved by the study of a foreign language at an age when the study of the latter forms is still amusing, and thus by a proper system there may be obtained lasting control of the necessary grammatical forms to assure facility in reading;
2. That to obtain sufficient ability to understand the foreign idiom in continued diction and in order to develop a facility to speak it, a distinction should be made between the lessons of practical exercises to be carried on exclusively in that language and the lessons for the study of formal grammar and of authors of firmly established literary value;
3. That unless the student is impressed with the particular genius of the nations whose language he studies, of the English political, of the French social, of the Italian artistic, of the Spanish chivalrous, of the German scientific we cannot hope to see that barbarism diminish which believes the foreigner anyhow to be inferior, his language ridiculous, his industry contemptible, his insistence upon outer forms of politeness the evident sign of the effeteness of the nation to which he belongs.

It will not be long before we shall be obliged to meet the competition of Germany for an important share of the world's trade. She has forged to the head in spite of an unfavorable geographical position and inferior natural wealth by dint of her people's orderly industry, by scientific methods, and last, but not least, by the reverent study of other people's manners, institutions, and languages.

Let us educate our coming generation to do likewise, not merely for the sake of the material benefits to be obtained, but to develop in the souls intrusted to our care, thru the respect for others, a noble self-respect making for order, law, and justice, which cannot fail to bring us nearer to peace on earth and good will toward men.

LITERARY APPRECIATION IN THE STUDY OF FOREIGN LANGUAGES: ITS OPPORTUNITIES AND LIMITATIONS; WITH SPECIAL REFERENCE TO THE STUDY OF FRENCH

ALBERT LEON GUÉRARD, ASSISTANT PROFESSOR OF FRENCH, LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

The opportunites for literary appreciation in the study of foreign languages are very meager indeed under existing conditions. In three years of high-school or two years of college French—a fair average for non-specialists—only the practical side of the work can well be attended to. Much of our elementary work in grammar and pronunciation has to be in the nature of a drill; the students have more to imitate and to memorize than to understand. Of course, something can be done, even in that limited time, and with the pressure of other work. Books of some literary value are placed in the hands of our pupils at an early stage. There is no excuse for having them read poor stuff, when there are excellent French texts just as simple in plot and style. I confess that the apparent favor of certain misrepresentative books, like *Dosia*, *J. P. Choppart*, and the inevitable *L'abbé Constantin*, puzzles me very greatly. If you run thru the catalogs of our great publishing houses, you will notice quite a few striking omissions, but many more unjustifiable inclusions. Our first duty, therefore, is to choose good texts from

the beginning; there is no lack of such, and the best as literature are not the least satisfactory from the pedagogical standpoint.

These texts are generally preceded by an introduction, which is often enough a perfunctory piece of work, but not seldom a valuable summary of the literature on the subject, and in a few cases a distinct addition to it: Olmsted's *Marivaux*, Babbitt's *Renan*, Harper's *Sainte-Beuve*, quoted at random among many, are good instances in point. Now we should see to it that our students read these Introductions, and read them carefully, not "by title only," as is too frequently the case. If the Introduction be deemed inadequate, a short lecture should be substituted for it. In every case, the students ought to know something about the author whose work they are reading. All this seems obvious enough, and yet few high-school graduates in our college courses seem to remember even the names of writers in whose company they have spent several weeks of their school life.

We should never read a story or a play without having our students quizzed—in English—on the plot, the setting, and the characters, so that we may be sure that they understand the book as a whole, and not merely each individual word. My colleagues and myself are periodically shocked by the discovery that good students, after carefully translating the whole of *Hernani* or *Tartuffe*, have very hazy notions about the story and the meaning of the play. This is a clear case of a forest not seen because of the trees.

Much fun is poked at the footnotes—in the old-fashioned editions: "Admire this line—Notice the harmony of that one—Mark the beauty of this passage." The usual result of such notes is to make the reader impatient; if they were effective, they would but tend to conventionality and slavishness of taste. I shall certainly not propose reviving them to their full extent. Yet there is no reason why the teacher should not call the untrained attention of his pupils to passages that his own cultured sense of literary appreciation has singled out. No need of telling his class: "Now admire!" like the leader of the *claqueurs* in a Parisian theater. He simply asks them to stop and think: "Is this beautiful, and why?"

Thus some good can be achieved, under present circumstances, if only the teacher feels his responsibility, and is himself a man of taste and culture. But I cannot help thinking that all the means proposed so far are but palliatives. We are able to introduce some literature into our language course, but so little that it hardly counts for real training. It is better to use good texts than poor ones: but while our students read them with pleasure, I am afraid they are not able to appreciate their literary merits. All the fine points of style, thought, and feeling are lost on young readers who are not yet masters of grammar, vocabulary, and idiom. They enjoy the story, when they understand it, rather than the way in which it is told. When the plot is not clear and direct, they are puzzled and dissatisfied: thus I have found Anatole France's *Sylvestre Bonnard* and especially his *Histoire contemporaine: M. Bergeret* extremely disappointing, even with advanced college classes. Such, I believe, is the situation—with the limited time at our disposal, with the lack of vital interest in the subject on the part of our students, with a general atmosphere not ideally favorable to literary studies, we can barely hope to teach languages well: can we spare any time or effort for the training of literary appreciation? I feel sure we could and we should; but this would involve serious changes in the spirit and method of our teaching. Literary training is an end in itself, no less worthy of attainment than fluency of speech, and much more independent of it than is generally thought. If we can have both, well and good; but then we need more time, more men, more books than at present. If it comes to a choice, let us not systematically sacrifice literature. In many cases, let the language go, if need be, rather than the thought.

It is undoubtedly possible to give in this country an all-inclusive French course, based on a thoro knowledge of grammar and pronunciation, affording ample practice in speaking and writing the language, and leading to the intelligent study of literature and

civilization. This is done in French high schools. I taught for a few weeks, as a substitute for Professor Kuhn, at the Collège Chaptal in Paris. There I saw boys of seventeen who were able to give in English an extremely interesting commentary on Tennyson's *Morte d'Arthur*. They had studied the language for five or six years, at the rate of three to five lessons a week. This is equivalent to what the French department in any good American college will do for its major students. But only for them, and they will never be very numerous: in our busy democracy, cultural studies which cannot be turned to immediate, practical use will never be very popular. We shall keep in our best universities a small and select clientèle of disinterested investigators, prospective teachers, young men of wealth fond of traveling, and future diplomatists. These will want to study French thoroly, in all its aspects. But what shall we do with the enormous majority of professional and business men, who cannot devote more than a couple of years to a foreign language? An all-round course is out of the question; should we adopt exclusively the Berlitz ideal, or try something different?

Because every waiter in the world is able to jabber some English and to understand some American, there is a widespread prejudice that we of this Western Hemisphere need not study any foreign language at all. Now, as a teacher of the subject thus slighted, as a native of France, as a man whose culture centers in language work, I cannot but abhor such an opinion as a vulgar and illiberal heresy. After thus venting my personal feelings, I feel bound to confess that the "average American" has some justification for his neglect of alien tongues. We should recognize that, whilst America needs at least as much foreign-language study as any European nation, it does not need the same kind. A few geographical facts will illustrate my meaning. Texas is larger than Austro-Hungary, where twenty languages are spoken — without mentioning dialects. California would stretch on the map of Europe from Paris to Buda-Pest. Paris and London are only half as far apart as San Francisco and Los Angeles. Western Europe—for Russia is almost an Asiatic nation—is a wonderful mosaic of countries, small in area and intensely individualized in culture. There a practical study of our neighbors' language, as it is spoken, is at the same time almost indispensable and comparatively easy. One can hardly move from one's native village without coming across some international boundary. Any Parisian teacher, any ambitious young clerk, any small business man, can easily spend a fortnight's holidays in London: it is only a matter of seven hours and five dollars. Here we have thousands of our high-school and college graduates who will never go abroad at all; they can't afford it; they are too busy; they want to see America first. Many others will cross the ocean four times in twenty years and *do* the whole of Europe in fifty-six days— generously devoting a whole week to gay Paree, which to them represents the whole of *La belle France*. Their practical French, carefully dusted up on the steamer, will probably be of little avail to them, for they will go the usual round, which is as American as Broadway. I sympathize with the busy man who cannot spare two or three years of effort for mastering spoken French. It does not pay, either in dollars or in culture. I wish it were otherwise, but we must take facts as they are.

On the other hand, America needs the influence of European thought and culture just because she has no immediate neighbor from whom she has much to learn. Thus isolated from the original home of the race, America would run a great risk of becoming provincial—for a province may be as large as a continent. Our duty as teachers of languages and literatures is to open as direct an avenue as possible between European thought and the American public; and I do not believe that Berlitz French is the straightest and widest avenue that could thus be opened. My contention is this: let us leave spoken French to commercial schools, which will teach it in the measure they find a market for it; in our high schools and colleges let us insist on literature and civilization, studied thru translations and original texts, with a strict minimum of composition and oral work. In other words, let us teach French mainly for reading purposes.

I know that to advocate the use of translation is a heresy; but I believe that a second-hand acquaintance with a foreign masterpiece thru the medium of your own language is a good deal better than total ignorance; furthermore, I maintain that a lucid, carefully written translation will often give a man a truer idea of the original than the one he would get thru his own painful blundering thru the original. I would rather have a man read Balzac in a translation than *L'abbé Constantin* or *J. P. Choppart* in the text. *Chantecler* is unintelligible in English, I am told; but it is also unintelligible in French to anyone who has not several years of assiduous practice. I should like to see, in our high schools, the kind of books used in France—carefully prepared, well-translated selections of foreign masterpieces, such as the Delagrave and Armand Colin collections. These anthologies and abridgments are used with great success even in the early stage of the course—at the age of twelve and thirteen. There have been individual attempts in this direction in America, but not enough in the way of a national movement.

The literature course based on reading is already a feature of our curriculum. I do not think much of the mere reading-course, without lectures, reports, and papers. The lecture course without a sufficient amount of carefully supervised reading may be entertaining, but it is little else; it was the old type of French university lectures, now banished from the Sorbonne, and still given before a fashionable public under the auspices of reviews and literary societies. A combination of all these elements—lectures, readings, reports, papers—can be made extremely effective. I should also like to put in a word in favor of an old-fashioned exercise which I should like to see revived: I mean the *version*, or careful, literary translation from a foreign language into our own. This has been very generally abandoned in favor of rapid, oral translation—too often slipshod, and of composition in the language studied. There is no better literary discipline than the old version, if conscientiously done; no better way of getting right at the meaning of your author; no surer test of your mastery of your own language.

Is this lowering the standard of language-study? Certainly not, since it means substituting the study of ideas for that of words. Is it yielding to the democratic demand for short cuts and easy work? Not exactly: it is abandoning a road that leads nowhither for one that can be made as hard as you please, but which is profitable and pleasant from the beginning. Am I advocating a suicidal policy? On the contrary, a course shaped according to these ideas should appeal to a much larger public than the present one—not because it is lower or easier, but because it supplies an actual need. There should not be a single doctor, teacher, preacher, or politician, in this wide land of ours, without an excellent reading knowledge of at least two modern languages, and a fair acquaintance with the literature and the history of the nations that speak them. A high-school course without universal and compulsory French and German or Spanish ought to be as inconceivable in this country as it is in France or in Germany. It is both an uplifting and a broadening of our standards that I am pleading for—to be achieved thru the frank abandonment of work which is neither practical nor cultural.

But if we are to teach literature, we ourselves must not neglect the study of it, and we have too often done so in the past. I have no time to dwell on this aspect of the question; but it is obvious that, especially in the Romanic field, literature in our leading universities has been woefully sacrificed to linguistics. Our best men have spent lives of unflagging energy in editing mediæval texts which they knew to be of no literary value whatever. I will not say anything against Romanic philology; it is a perfectly legitimate branch of science, but a minor one, which should not be allowed to smother the much wider and cultural study of literature. That this smothering process has taken place—is still going on—is evident to anyone who reads the catalogs of our universities, or looks for the titles of the works published by our best scholars. While every university professor of foreign languages in France has published at least one large book which is a permanent contribution to literary criticism and history, practically all the work of the same kind in this country has been done by outsiders—men unconnected with any

university, or professors of English. This neglect of literature sometimes goes to incredible lengths. In a rich institution, well equipped for mediæval work, the following authors, three or four years ago, were absolutely unrepresented in the library: Agrippa D'Aubigné, Régnier, Bossuet, Montesquieu, Michelet, Taine, Renan. A reaction is coming: let us hope it will be sharp and thoro. At present, the higher study of Romanic languages, supposed to prepare teachers for the schools of the nation, is scientific or pseudo-scientific in character, and absolutely inadequate from the literary point of view. It is both un-French and un-American.

I do not know whether the opinions expressed in this paper are those of a premature old fogy or of a hot-headed radical. I hope you will not doubt that whether paradoxical or commonplace, they are inspired by a sincere devotion to the cause of modern language teaching. A Frenchman by birth, an American by choice, the aim of my life is to see America and France brought closer together. And for such a purpose, I believe that the study of literature is the surest and pleasantest way.

SIMPLIFIED SPELLING FROM THE SCHOLARLY STANDPOINT AND WITH REFERENCE TO THE MASSES: THE ARGUMENT FOR SIMPLIFIED SPELLING

ABRAM GIDEON, COLORADO TEACHERS COLLEGE, GREELEY, COLO.

The ability to spell correctly is frequently overestimated. In the estimation of some people of a pedantic turn of mind it has come to be associated with a high degree of learning or stands for unusual mental power. In reality, however, the habit of correct spelling is, for the most part, a purely mechanical process, due primarily to training of the visual memory; in less measure, tho differing in different individuals, to development of the auditory and the graphic memory. We have learned by observation that a given set of symbols is associated with a given speech form, to which we have come to apply in writing the special combination of characters by which it is represented. Now, in this process no high degree of intellectual acumen is involved, and, so far as English spelling is concerned, no great dependence upon the reasoning powers. Indeed, it might even be maintained with a fair degree of justice that, in the present state of our orthography, a child will the more readily learn to spell correctly the less it is accustomed to rely upon reason. It cannot be denied that in learning to spell the power of accurate observation must also be aroused and stimulated, and that we encounter in this particular a valuable educational asset. Too often inability to spell correctly anomalous or even regular forms goes hand in hand with a carelessness characteristic of the mental make-up of the individual. But on the whole it still remains true that he who has mastered the orthographic peculiarities of his native or a foreign language does not, on that account, possess an accomplishment of an especially high order.

Nevertheless, in spite of this contention, correct spelling, i.e., the written form generally accepted for all but a small number of the words of our speech in regard to which usage varies, is as desirable as correct speaking. Whoever insists upon it as one of the results to be striven for in a system of education has weighty arguments to support his plan. The practical affairs of life demand a uniform medium of exchange in the written form of our intercourse as well as in the coinage of the land. Departure from the generally accepted standard acts as a disturbing factor in so far as it does not follow the line of least resistance. Moreover, orthographic blundering impresses us as being ugly; it jars upon our sensibilities. But it is not only ugly to spell incorrectly, it is to a certain extent unsocial. The person who persists in doing so isolates himself in that respect from society. Refusal thru unwillingness to abide by accepted usage in one's intercourse with his fellows—and the written word is only a form of human intercourse—is unsocial, and to that degree it is unethical.

Admitting, then, that the ability to write with orthographic accuracy does not represent an extraordinarily high acquisition in the scale of mental attainments; granting, furthermore, that it is, from various points of view, important to conform to accepted usage, let us next turn to the problem which gave rise to the movement for simplified spelling. Primitive man first communicated his thoughts, when he did not do so by oral speech, by means of pictographs—that is to say, pictures or symbols representing ideas of objects, attributes, or activities. Hunting, for example, would be represented by means of the picture of an animal familiar from the chase, the sun or day by means of an image of the sun, night by means of the picture of a reclining man. A further step in the progress of writing is made when the picture or symbol no longer represents an idea but a sound, the component sounds of a word being then graphically portrayed by a combination of symbols. When the sounds have become sufficiently simple and the characters by conventionalization have been stripped of all or the greater part of the marks of their pictorial function, the alphabetic stage is reached. The alphabet is therefore in origin phonetic: letters represent sounds. If, then, the invention of the alphabet is due to the need of advancing civilization for a system of graphic signs representing the sounds of language, it follows that written speech, properly so called, in its beginnings mirrors, and in its subsequent development tends to reflect, the actual conditions of oral speech. As spoken language changes, a corresponding change follows in the written form, with this difference, however, that the speech form alters more rapidly than its graphic equivalent. Because the written language does not keep pace with the spoken, in course of time, especially after the rise and growth of literature, there comes to be a wide divergence between spelling and pronunciation. This is more or less true of all languages, but particularly so of English, the history of which furnishes a most striking example of how the natural relation between speech and writing has been disturbed.

In the early stages of our language, according to Skeat, phonetic spelling was the rule, orthography being based upon Latin models until about 1200. With the coming of the Normans there ensued a process of respelling "the whole language upon French principles which did not always coincide with those that had been adopted previously." While this revision still left the language upon a phonetic basis, in the sixteenth century came a "pedantic revision," which introduced the principle of historical restoration according to Greek and Latin originals. From now on the logical relation between the two expressions of language ceased and "spelling became a mere instrument for the use of printers." Now, we are told, the early printers of English were not native, but Germans or Dutchmen, who knew little English. In consequence, the diversity of spelling prevalent before the invention of printing not only continued, but new variations, arising from the ignorance or caprice of the printers, were introduced. So great was the resultant confusion that in the later part of the seventeenth and early part of the eighteenth century an attempt was made to secure uniformity. This effort, however, was not guided by persons cognizant of the history and principles of the language, the only authority competent to undertake such a task, but left to the judgment of ignorant or half-educated proof-readers. Johnson's Dictionary, published in the middle of the eighteenth century, accepted these spellings and gave them authority. Scholars are agreed that Dr. Johnson's influence has done more to fix English orthography in the mold it has assumed, to give permanence to the "mismade" spellings that had arisen, than any other single cause.

I need not now attempt to tell the tale of the woes of English spelling; it will suffice here to notice a few of the most distressing manifestations. To the mode of procedure in fixing our orthography just outlined we owe:

comptroller (as tho it were related to Fr. *compter*), instead of the older and more correct *controller*=keeper of the counter-roll or contreroll.

sovereign (as if related to Lat. *regnum*), for the older *soverain*.

debt and *doubt* (imitating distant Lat. originals), tho earlier English spellings were *dette, doute.*

receipt (again a restoration), tho we use *deceit* and others of like derivation.

aghast and *ghastly*, after the analogy of *ghost* (from A.S. gâst) where the *h* is a fifteenth-century insertion.

The useless distinction between *-cede* and *-ceed*, the first based on French models, the latter to show the length of the *e* sound, as a result of which we write *concede, precede, secede*, but *exceed, proceed*, and *succeed.*

æsthetic and *mediæval*, but *demon, phenomenon*, and *era.*

A mere glance at the means we employ to represent one and the same vowel sound will show how merited the charge is, that when one hears an English word he cannot tell how it is spelled and when he reads an English word he cannot say how it is pronounced.

The sound of long *a* in *lake* is represented by different characters in *late, eight, break, stay, aid, aye, grey, potato.*

The sound of long *e* in *meet* is variously assumed in *meet, meat, mete, receive, believe, machine, depot, œsophagus, coœval, people.*

The sound of short *e* in *bed* employs different symbols in *bed, bread, says, jeopardy, heifer, any, again, friend, bury.*

With only a reference to the well-known fact that each of the symbols used to denote any one of these sounds may itself have a variety of sound values, let me close the indictment by simply reminding you of the equally well-known diversity of sound of the combination *-ough* in *though, through, rough, cough, plough.* Woe to the child whose heritage it is to find his bearings in such a maze! True, he does master the perplexities of the traditional orthography, but with what herculean efforts, with what frightful expenditure of energy!

This, then, is the situation which gave rise to the Simplified Spelling movement. The English language is full of anomalies and perversities, useless letters and cumbrous forms which it is possible to eliminate without any loss. It has been estimated that about two years of the school life of the child are consumed in learning to spell. Calvin Thomas has pointedly observed that the time wasted on "dead languages" is but as a drop in the bucket compared with that consumed on "dead spelling." Recognizing the waste involved in this process, aware of the burden imposed upon the adult mind in retaining what has been once acquired, estimating the loss of time, money, and energy incurred thereby in publication, realizing the needless load put upon the foreigner who attempts to learn English, the Board at the head of this movement has set itself the task of improving the situation as far as practicable. It does not aim with revolutionary spirit to reform the language according to some abstract, utopian idea, but to simplify it according to a process which has operated thruout the centuries and which it only proposes to accelerate. It does not attempt to apply to the English tongue thoroly and systematically the phonetic principle—each sound represented by but one symbol and each symbol representing but one sound—but only to seize upon certain tendencies, analogies, rules, already in force and generalize them. In spite of the most emphatic protestations of the Board to the contrary a widespread popular misconception, apparent in newspaper caricatures, advertising burlesques, and even magazine editorials, would have it that the movement means people shall "be allowed to spell just as they've a mind to." Nothing of the sort is intended. Not only does the Board refuse to sanction indiscriminate spelling according to individual utterance, it has not even proposed any simplifications of its own without the authority of standard usage. Of course, the phonetic principle is recognized; but it is applied only to the extent that it finds support in good writers or rests upon analogies. The first list, proposed in March, 1906, contains three hundred selected words "spelled in two or more ways" of which the simpler form is recommended. Many of these had already won all but universal acceptance, and all of them are supported by the usage of recognized authors. Who, after carefully examining the list and noting the ground for preferring the simpler spelling, could detect

in a single instance any violent revolt against the traditions of our language or any phonetic monstrosity? Yet the acceptance of them represents a substantial gain and marks an important step in the direction of simplification and order. In accordance with its original plan, the Board published in January, 1908, a second list, following the same principles that determined the selection of the original three hundred. This list contains three classes of words, the first of which, consisting of seventy-five amended spellings, are largely restorations of earlier and more correct forms erroneously discarded. The second and third class comprise forms simplified according to general rules, the operation of which is noticeable in numerous examples long current. The simplification of the words belonging to the second class is secured by the omission of silent *e* final in unstressed syllables containing short *i;* while the third class substitutes *-t*, when pronounced as such, for *-ed* in inflectional forms or derivatives of verbs that end in a voiceless consonant, unless the spelling *-t* would conflict with the pronunciation of the word. Altho the second list includes on the whole more unfamiliar forms than its predecessor, for one reason because it comprises a larger number of words, nevertheless it appeals to us for acceptance on equally strong grounds. The simplified forms rest on good authority, they are convenient and economical, they are genuine, in some cases more so than the ones supplanted, they help to establish the principle of order in our chaotic orthography.

A third list appeared January 25, 1909. If the address of the president of the Board at its second annual meeting in April, 1908, can be taken as a forecast, nothing radical will be attempted. Should anyone fear great innovations before the ground is properly cleared, let him read with what emphasis warning is given against any change in the present system of representing sounds until the whole matter has been thoroly investigated by a committee of experts equipped for this task by reason of special training and recognized scholarship, the report of this committee to be taken as a guide for further action. No alteration that does not with certainty indicate the pronunciation seems to be the watchword. In Professor Lounsbury's own words: "Every genuine simplification of the spelling which has ever taken place in our language has been of the nature of an approach to the phonetic standard."

I shall next consider some of the objections to the movement, since by answering them the argument for simplified spelling can be made all the stronger. Objection to the proposed changes arises, in the first place, from the fear that if they are adopted and come into general use we shall lose connection with our classic English authors—that the literature of the past will be for the generations to come a sealed book. But the argument is utterly groundless. It takes no account of the fact that the spelling of Shakespeare is not the spelling of today, any more than it was the spelling of the Middle English authors. If the simplified forms were to be adopted in toto and henceforth appeared in all books published, they would represent no wider departure from the spelling of the nineteenth century than this differs from the Elizabethan. We are used to reading our classic authors in modernized versions and are therefore not aware of the difference. But let anyone who doubts the justice of this claim examine the original editions or reprints, and he will find proof abundant in numerous unfamiliar and bizarre spellings. He will encounter, on the other hand, many a form that coincides with the proposed simplifications.

Another form of this objection concerns itself with the supposed difficulty experienced by the present generation who have learned to spell according to the method now in vogue. The amended spellings would confuse, so it is maintained, and divert attention from the thought of the written or printed page. The point would be well taken if the facts supported the charge. Certain educational journals and other periodicals have for some time been employing simplified forms without disfiguring their pages or causing the reader undue hardship. The proportion of changes to the words left intact is so small as to allow him to feel that he is still reading the same language. Even against such publications as employ all the amended words adopted to date, e.g., the circulars of the Simplified Spelling Board and, among others, the catalogs and bulletins of the

Iowa State Teachers College and of the Colorado Teachers College, the charge would not hold good. We have yet to hear from a prospective student the first complaint that his mind was so much occupied in deciphering the text as to prevent his understanding our requirements. It must not be forgotten that a reform of such magnitude cannot be launched into universal use at one fell swoop, that it must work its way gradually, that it need not appear in all books immediately, and must not be indiscriminately applicable to all circumstances. Unless one takes into account a special situation, there is danger of defeating one's purposes by injudicious obtrusion. A candidate for a vacant school position would act unwisely if in his application he should thrust upon the notice of a superintendent notorious as an unregenerate adherent of deformed spelling his preference for simplified spelling.

This brings us to an objection from the æsthetic point of view. Here we must distinguish between a real æsthetic objection to misspelling and a so-called æsthetic objection to simplified spelling. It has previously been admitted that deviation from commonly accepted orthography thru ignorance or carelessness is ugly, but this does not apply to a mode of writing that has a rational basis. The impression made upon an unsympathetic reader when he meets the simplified forms in print is not unlike the feeling he experiences at the sight of a translation into foreign tongues accompanying the English version of the same subject-matter. Meeting in such garb, say an advertisement describing the merits of "Peruna," or a certain corn salve, or brand of stomach bitters, the unusual appearance of the text may strike the English reader as odd, it may occasion him some discomfort, but he is not for that reason warranted in calling the page ugly; else the same charge would apply with equal force to a page of phonetic script as is now common in grammars and readers of foreign languages for indicating the pronunciation. Would anyone, if he happened to be unacquainted with the language, call a page of Italian ugly, simply because its unusual appearance disturbed his wonted associations? It seems to me that if harmony is the essence of beauty the charge of ugliness is merited rather by the traditional spelling. The fallacy involved in the opposite contention is due to paying too much heed to mere habit. Our conception of beauty has not only a psychological origin; it has a no less important logical basis. The old associations that cluster about the familiar spelling and make it dear to us ought not to prevent us from seeing its defects. There is too much at stake here to be guided solely by sentiment. In course of time, if not by us then by the generations that follow us, a rational spelling will be cherished as dearly as was the irrational spelling that it shall have superseded.

The apparently strongest objection of all appears in the shape of the etymological argument; however, it is no more cogent than the others. We are told by our opponents that the proposed changes will obscure the derivation of words. But the alterations in spelling that have taken place in the several stages of the history of our language have not had this result. Etymology is secure in the literature of the past and in the work of the scholars whose intelligence and knowledge qualify them to trace along their devious course successive modifications that words undergo. In laying so great stress upon the etymological argument the mistake is often made of paying too much regard to the visible symbol. Language is primarily spoken language. It does not exist as a means of mummifying decayed roots that have lost their vital energy, but as a vehicle of thought and expression. Its changes are determined by practical needs. This is at bottom the source of Professor Münsterberg's error. A foreigner who learns the language from books takes a subtle delight in discovering, in the forms of English words, in its prefixes and fossilized remains of an extinct pronunciation, faces already familiar to him from Greek and Latin, or other languages. For the sake of retaining "the historical flavor of words," which Professor Münsterberg asserts is destroyed when we cut off the useless *ue* in *prologue*, we ought to have preserved something nearer the original Greek *παιδαγωγός* than its modern frenchified *pedagogue*.

A few considerations will show that change of form does not necessarily obscure derivation. On the contrary, from what has been said of the early state of printing in England and the rise of our present orthography, it is apparent that the traditional form of a word is frequently no safe guide to its origin. *Comptroller* has nothing to do with the Fr. *compter*, meaning to count; *sovereign* has no relation whatever to Lat. *regnum*. These spellings are mistakes pure and simple, and mislead the amateur etymologist. On the other hand, certain words mirror the change that has taken place in their utterance and yet their derivation has not been obscured by the alteration. *Humble* is derived thru Fr. from Lat. *humilem*, accusative of *humilis*. Our *humility* has the same origin. The *b* of the adjective represents a phonetic change which did not take place in the substantive, where the vowel sound was retained between the *m* and its following *l*. *Gender*, thru the Fr. from Lat. *genere*, ablative of *genus*, has a *d* which does not occur in the original nor in the adjective *generic*, a phenomenon to be explained in the same way. In these words, which are not isolated examples but members of a fairly large class, the spelling has been made to conform to the pronunciation; the modification that has occurred in the course of their development to their present form is genuinely phonetic, yet their real origin is apparent.

Moreover, in Italian, the orthography of which is remarkable for its close correspondence to the pronunciation, Lat. *clavis* has become *chiave*, Lat. *flumen* has become *fiume*, in obedience to a phonetic law, the *l* not being pronounced, therefore not written; *filosofia*, *fotograo*, *fantasia*, are spelled with plain *f* instead of with a clumsy substitute for Gr. φ. As these changes have taken place without dulling the etymological conscience of the Italian people, need we fear that this calamity will befall the English-speaking peoples if we spell *succeed* as we do *secede* or if *demagogue* loses its caudal appendage?

Let me close my argument with a brief summary of the progress of the movement up to the present time. In the ranks of simplified spelling are actively enlisted: the Modern Language Association of America, the members of which individually and collectively have done pioneer work in the cause; the National Education Association, to whose efforts the Simplified Spelling Board owes its initial impulse; normal schools in Colorado, Illinois, Iowa, Minnesota, Pennsylvania, and Wisconsin; public schools in more than eleven states; a number of eastern business colleges. Simplified spelling has been approved by the state teachers associations of Colorado, Illinois, Iowa, Minnesota, and Wisconsin. Among the members of the Board and Council are to be found our most eminent specialists in English philology and English literature, writers and other professional men, scientists and men of affairs. It is a significant fact that the names whose mention carries most weight in the domain of English scholarship figure among the most enthusiastic adherents of the cause. No authority in English in this country or abroad is known to have written or spoken against the movement, tho there may be one or another who for practical reasons does not care to join the ranks of the propagandists. Editors of our leading dictionaries—Webster's, the Standard, the Century, and the Oxford English Dictionary—belong to the Board, as does also the eminent etymologist, Skeat, who has assumed the leadership of the English society recently organized for the advancement of simplified spelling in Great Britain. In order to promote the use of the simplified forms in print, a league of editors and publishers numbering more than three hundred members has been organized in the East. It is reported that adjustments to the new conditions are made in the publishing business without any serious inconvenience to compositors or to proof-readers. One prominent publishing house uses the amended spellings in its business correspondence and has begun to do so in the publication department proper.

From this brief account you will see that considerable headway has been made—enough, it seems to me, to encourage anyone who hesitates to co-operate in the movement for fear lest he be found in rash company. No teacher has a right to stand back solely because of the real or fancied inconvenience he may suffer in learning to apply the sim-

plified forms. This hardship has been grossly exaggerated, as I know from personal experience and from the documentary evidence of others. The attitude of this Conference will do much toward influencing the attitude of the teaching force thruout this state; it will do much toward molding public opinion, toward silencing cheap ridicule and preparing the way for the triumph of reason and common-sense; but it will do more for the children, who will derive the benefit of your courage and example.

SIMPLIFIED SPELLING WITH REFERENCE TO THE MASSES

HOMER H. SEERLEY, PRESIDENT, IOWA STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA

The condition.—Popular education in the English language faces a condition and not a theory. The problems involved in the undertaking, to give universal education and training to the masses, are so notably complex that their solution cannot be easily accomplished. If they are ever to be solved at all, it means that educational methods and plans have been simplified very much beyond present-day experiences and that the processes and notions of the practice of teaching have been completely rationalized. The problems of higher education are simple, because they deal with the intellectually superior, while the problems of elementary education are especially difficult because they deal with all classes and kinds of men that make up the masses. Teaching practical English to the whole people implies a mastery of capability and the comprehension of the needs that are almost beyond realization.

Universal elementary education assumes that its mission is to make life better and more serviceable for the many, rather than for the few; that its work reaches the actual foundations of society and civilization rather than the specially cultured classes; and that its ultimate success means the betterment and the happiness of the race thru the actual amelioration of the individual. If there were no other reasons for the simplification of English spelling than that of the universal need of the masses that are to be educated for serviceable and useful life, then this ought to be sufficient to destroy any opposition that could be proposed against the progress, acceptance, and adoption of the movement.

The masses.—The success and permanence of a democracy very largely depend upon the intelligence, the capability, and the character of its representatives. In all improvements, progress, and reforms that may be developed thru the evolutions that must occur in a democracy, the importance of the qualifications of the individual voter becomes more and more evident, since the decisions of the voter at the polls become more and more valuable as the years and the complexity of such civilization advance. Ignorance is a menace to institutional progress of every kind, and the only hope for such forms of government is intellectual balance in the citizenship.

The endeavor successfully to teach the masses the irregular, conventional forms of English spelling that exist has resulted in very unsatisfactory results, since hardly more than half of the people are able to show capability in the limited vocabularies that their vocations and careers require. This incapability of knowing things for themselves has kept them unable to protect their own rights and has made them the creatures of circumstances that ought to be entirely removed by better quality of education and training. The necessity of having a simpler spelling for the English language is absolutely required if the schools are to be able to train the majority of the people in a reasonable and essential literacy. There is no question but that the acquirement of reading and writing English creditably is the right that should be conferred by receiving an elementary education such as the public schools are organized and conducted to give. There is no particle of doubt but the simplification of the spelling will reduce very much the energy in application as well as the expenditure of time and money and also give a remarkable assistance to the progress essential to universal education. Since the masses are always

to be given first consideration and are to be preferred to the classes—even when the classes are produced by anomalies and inconsistencies in spelling alone, it is evident that any reform that would assist the masses to the attainment of capability in reading and writing the language is fully justified and should be truly and heartily welcomed.

The result.—The adoption of simplified spelling, as the course of study for the elementary public schools, will not cripple the public later in recognizing the conventional forms in our literature because the changes recommended are not serious enough in their departures from the conventional forms to mar the appearance of the printed page. The result that would eventually take place would be the permanent substitution of the shorter form for the longer form, and progress in simplification would become universal in one generation. The work that is being accomplished by the most notable linguistic scholars of America and England will make the printed language more phonetic and will reduce the difficulty of learning it for both the native and the foreigner. It will give much progress in making the English language a world language, as it will enable the usage of it to become more largely universal. Standardization of English spelling should naturally be directed toward the phonetic type as any other plan is contrary to both sense and philology. The result of having two acceptable forms, the conventional and the simplified, will eventually lead to the universal adoption of the simpler, shorter, and easier form for all practical purposes. The claim that the dictionary is to record usage rather than to improve usage is fallacious and unprogressive and should never be accepted as either judicious or rational by those who are directly working for the progress, the success, and the welfare of the common people.

The urgency.—This great endeavor should not be postponed for a generation, because it is urgently needed now and its possibilities are rapidly being recognized by both linguistic scholars and by elementary teachers. The National Education Association is assumed to be specially interested in the education of the masses. Its very principles of organization and management should compel its members to work on the problems that are practical rather than those alone that are speculative. Real reforms should be welcomed and accepted, real progress should be hastened, actual developments and improvements should be urged and compelled, and elementary education should be made satisfactory and universal. If the National Education Association cannot accept such things as these as its mission, it becomes thereby a mutual admiration society without effective object as an end and without genuine reasons for existence. Reforms and progress of every kind that pertain to public education should be its province and its purpose.

The using of the shorter forms.—Practice not profession should be the action of all adherents of the cause. Courage and conviction should be proven by usage and this usage should include the vast majority of spellings that are recommended. The change to the shorter forms is very easy to make, so easy that it seems discreditable to claim such a plea as any reasonable excuse for not so doing. The necessity for people of influence and scholarship setting the example of such accepted change to the common people is very important, since for the sake of progress even those who might get along without simplification can afford to do no less than show their sympathy and co-operation by actual acceptance. The fact that certain publishers of great dictionaries have yielded the point on giving recognition to these shorter forms commends the adoption and the usage to the public as never before. The fact that the most noted linguists are able to commend the plans and the work accomplished at present; the fact that certain schools of high standing have granted their co-operation without hesitation and without disrepute, all make it evident that the right side for the educator to take is that of supporting and adopting the results that guarantee certain progress to universal education.

The key alphabet.—Joined with this great reform of a simple spelling is that of a sensible, suitable, key alphabet to represent pronunciation. The report of the Committee of the Department of Superintendence, after seven years' co-operative labor with the American Philological Association and the Modern Language Association,

gives the best solution to this problem that has ever been presented. It is a simple key, it is suitable for public-school work, it is easily acquired, it is truly phonetic, it harmonizes the use of the vowels with European, continental languages in many respects, it is not copyrighted as the property of any publisher, it can be used by any and all publishers, it is of a character and kind that deserves commendation of scholars and teachers, and hence its acceptability is real and genuine. It gives promise also of going farther than a key alphabet in time to come, since these key forms can very easily become the standard forms after the key is universally used and the masses become thoroly acquainted with it as they will be. It will eliminate a multitude of difficulties that are now existing in the conventional forms in common use by giving a key that can safely serve as a method of transition from an irregular and unscientific spelling to a purely phonetic spelling. It does this also without abandoning the actual letters of the standard alphabet and without making actual new ones, and therefore it keeps the traditions and customs that have governed the English-speaking races for many generations.

DISCUSSION

William T. Foster, president, Reed College, Portland, Ore.—I asked permission to have my name last on the program in order that I might make the afternoon shorter than it otherwise would be. I leave it in your hands. If there are any topics in connection with the movement for simplified spelling, any questions connected with it, that you would like to hear about now, you may ask these questions. The responsibility is with you.

Everyone here uses or does not use the simplified forms recommended by the Simplified Spelling Board. Everyone present is supposedly a rational being. If he does use those simplified forms, he has reasons for using them. If he does not use those forms, recommend, and teach them, he has reasons for so doing, he has objections to the movement. If you have objections, I would like to hear them now.

J. Henry Senger, University of California, Berkeley, Cal.—I am fully convinced, first, that our children are handicapped at least one year by the present spelling compared with children of nations who have rational spelling. Secondly, I have seen the introduction of an improved spelling by the three governments of Germany, Austria, and Switzerland effectually carried out within a very short time. We have all more or less accepted it, with the exception of a few fogies, who continue to spell *thru* with an *o-u-g-h*. However, it seems to me that the missionary business has been done successfully already by our Association. The next step is a great meeting of representatives of the English-speaking nations in London to deliberate on what has been done and what changes should now be introduced by the governments of all English-speaking nations. Leave the newspapers alone. Many of them will not change except under special circumstances. But I think the next step we ought to advocate is to insist upon the practical solution now by the governments of the English-speaking nations.

H. C. Hall, principal, Irving M. Scott Evening School, San Francisco, Cal.—I want to relate a little incident that happened to me as a school teacher in San Francisco, and then will state an objection that confronts us in California. I had occasion to teach a Russian peasant class for one year, and when I gave them the word "spell" or taught the word "spell," they all looked at me with a blank expression. When I asked what the matter was the most intelligent Russian said: "Mr. Hall, we don't understand what you mean by that word 'spell.'" I tried to explain to them and then they realized what I was getting at, and asserted that such a word was not in the Russian language, that the Russian language was constructed so strictly upon sound that there is no necessity for such a word as "spell" and no spelling required. Later on, thru my experience, whenever I came across words such as you illustrate on the chart, there was also a grimace and a little sly laughter in the class, and I had to stand for having fun poked at me. But let

me tell the objection language teachers are meeting with. The State Board of Education proposes a textbook on spelling and then every teacher in the state is required to use that textbook, and at the end of the year when we are making our annual reports we have to make an affidavit to the effect that we have used the state textbook. Consequently, we are bound down by that iron-clad tradition to stick to the old form as expressed in the textbook, and we are not allowed by law and by our oath to vary and go along the lines as you suggested today. I wish to ask the speaker what remedy he would give us in that case.

Mr. Foster.—There are occasions when a teacher should not rebel against the authority of the school board. If the law requires that a teacher shall perpetuate the mistakes of the Middle Ages the teacher has to perpetuate them in the school, or resign. I should be inclined to resign, or try it, and see what happened, but others are not at liberty to do so. I have no quarrel with them if they continue to teach the old forms. They might use an antiquated spelling-book and at the same time point out the antiquities and arouse interest in newer, simpler, and more sensible forms. If that is objectionable, the teachers could at least teach something of the history of the language. That is a mere matter of fact, whether anybody likes it or not. Every teacher is at liberty to give some insight in the development of the language. That at least would help in our schools. We might go a little farther back and say that it would do teachers themselves considerable good—especially those who are not interested to the extent of attending conventions—if they themselves would learn something of the history of the language and thus illuminate their teaching of spelling. Furthermore, they could at least use simplified forms in their personal correspondence and could personally advocate it. The great trouble, as we all know, is not that we are prevented from doing things but that we don't care enough to do that which we are able to do. If all the teachers of the United States today who are at perfect liberty to spell sensibly would do so, and express their opinions to those less competent to judge, I believe the whole question would be settled. The newspapers will do whatever we wish. If you want simplified spelling you will get it. The teachers of the United States have not yet given sufficient evidence that they want simplified spelling. As for the suggestion that a national conference should decide this matter by the government, it is a capital way of doing things in the German Empire. It is impossible in the United States. We have one of the largest, most competent, and most practical bodies of men that the world has ever seen addressing itself to an educational question. Nothing comparable to the Simplified Spelling Board has been known in the history of the world. And there is a further significant fact, that the present board is the only one in the history of the world that has ever had sufficient financial support to make known the results of its work. I believe, as I believe in the possibility of the progressive intellectual development of the human race, that this simplified-spelling movement will dominate, and that most of us who are here today will be following this method of spelling as a matter of course, and will be looking back on those curious old days when we attempted to prolong the mistakes of our mediæval ancestors. I believe this because I believe that the present generation, the generation in which you and I live, is the most scientific generation that the world has ever seen. We began first by introducing the study of science in our schools. We have gone even farther. We are now addressing ourselves in a scientific spirit to the study of education itself. More than that, we are not only doing that in the lower schools, we are not only doing it in the secondary schools, but colleges are now addressing themselves in increasing numbers to the scientific study of education. They are willing to study the situation scientifically; to find the evidence, and to follow it wherever it leads. Within the past twelve months I have been all over the United States, and have visited over one hundred and fifty universities and colleges. One of the most interesting points has been my observation of a scientific attitude toward problems of education. As you know, in the days of our forefathers, nearly all questions of education were settled by tradition and authority.

The rule was, what has been, should be. Our schools and colleges were little more than imitations of what had gone before. Down to the present time there has been little attempt to look the facts squarely in the face and find out what conclusions could be logically drawn from the facts. Questions have been settled by the opinion of somebody who happened to be sufficiently aggressive or sufficiently dignified. But the time has come when we are wary of any opinion which is not the result of scientific investigation. I do not care what you think about simplified spelling. I do not much care what you think about any question of education. Your opinion is not worth much. Mine is worth less. The whole batch of opinions can be swept aside and an effort made to get at the facts and interpret them. I find in every university of any standing whatever, evidence that they are addressing themselves to the problems of education in a scientific spirit in an endeavor to face the facts and find out where the facts lead. I cannot but believe that anything which is logically defensible will triumph, and simplified spelling is logically defensible.

Mr. Garlick.—I should like to ask the speaker a question: Will you be kind enough to tell these people how for one cent they could get this literature and read these splendid papers that have been published, literature that is so instructive? I should like to ask this question before you answer the other: How many of the teachers here have this literature? Every one of them ought to have it. They can get it without money and without effort, excepting a one-cent postage stamp.

Mr. Foster.—If anybody here wishes to know the truth about the movement and not to depend on what he has heard about it, or how the newspapers may have represented it, he may receive the information by sending his name to the Simplified Spelling Board, New York City. Or you may give your name and address to Mr. Seerley, or to Mr. Gideon, or to me. I am sure we shall be glad to see that your names are put upon the permanent mailing list and that you receive not only previous publications of the board, but those which may come out from time to time. If you want to receive also the bulletin—that is, the little magazine which is published from time to time, you may become subscribers to that by the payment of ten cents. If you do believe in it—and I think that you, as rational human beings and as teachers, ought to help in the movement—it seems to me it is your plain duty not only to ask for information but to enroll yourselves as users of simplified forms and have your names placed upon that list.

William J. Drew, Polytechnic High School, San Francisco, Cal.—I am at the head of the Department of Mechanical Drawing and Applied Science in the Polytechnic High School of this city; so you may think I have no business in this room, where you are talking about modern languages. But I have had the honor of being a student of German under Dr. Senger, at the University of California, several years ago, and ascribe some of my interest in this subject to him. Also, having been a student of phonography since boyhood, under my father, who studied with Ben Pitman, naturally my interest in simplified spelling is of long standing. About three years ago I had the pleasure of signing a card and joining the simplified spelling movement, and since that time have induced twenty others to do likewise. I use the simplified-spelling forms in my correspondence as much as possible, and take a great deal of pleasure in going farther than that in a private way. My father, Mr. J. R. Drew, and I have devised a system of fonetic spelling which we have used in correspondence for one year. We think it a logical system, find it to be easily acquired and simple to use. Correspondence is invited.

George R. Noyes, University of California, Berkeley, Cal.—I have a very few words to say. I have been impressed in listening to the arguments that have been presented, and I think all of us must feel that the campaign of the Simplified Spelling Board has done some good in the community and has made some headway. Against the general idea that spelling needs reform there is no more objection than that the tariff needs reform.

There is an analogy, I think, between spelling and custom. We, all of us, hate starched shirt bosoms and stiff collars, at least, I think most of us do; but none of us are anxious to be the first to discard them. Dress reform is not in our line. Spelling reform is in our line and we have a right to take an active part in it. I know very little about primary instruction, but I think that something could be done to teach English spelling in much the same spirit as we teach civic government, as a subject in which reforms are needed and in which they are practicable. I wish to close with one contribution to the lighter literature on spelling reform. I gave some of the pamphlets to a student in the university, who was studying botany. He came to me a few weeks later and said: "Say, you got me into trouble with that new spelling of yours. I used it in my thesis, in which there were Latin words—and I simplified the spelling of them. But the professor told me that Latin was a dead language and could not be simplified." Now English is a live language and we can help to simplify it.

GRACE DAVIS, Oregon State Normal School, Monmouth, Ore.—I had very little knowledge of simplified spelling until about a year ago. I had heard several people speak about it, but they had told me that it was simply a foolish fad that would pass away in time. So I had no interest in it and had never taken the trouble to study the matter until suddenly I found myself editor-in-chief of the *Crucible*, the school paper of the Colorado Teachers College. Then I was in a peculiar situation. I had no interest in simplified spelling, yet the editors of the paper had been in the habit of using simplified spelling thruout its issues. So it was necessary for me to learn simplified forms. I started out on my first month's work with little knowledge of simplified spelling. I took the list which the board had published and which I had secured and tried to learn the new forms merely by means of the list, without a knowledge of the rules. I do not know how long I continued that method, but I found that I got into all sorts of difficulties. For instance, I could not tell exactly when to leave off the *e's* after *il*, *in*, *is*, and *it*. As soon as I found what difficulty I had, I took the pamphlet and expected to devote several hours to the study of rules. I thought it was going to be a terrible task to learn them, because they covered over three pages, but when I came to settle down to the work they seemed most sensible. All that was necessary was to find exactly how far the board had gone in simplification. As soon as I learned that the rest came easily, for the rules are nothing but common-sense facts. The use of the simplified forms at first gave me a little difficulty because of the fact that it took a conscious effort on my part to keep the rules in mind and not lose sight of the text of the work which it was my business to read before publication. But this difficulty soon vanished also and I was able to devote my time entirely to the contents of the paper I was reading, the simplification coming just as easily as the regular spelling had come formerly. Neither did it interfere at all with the old forms of spelling. I can use them just as readily as I can the simplified forms, and if I wish to use the simplified forms in my correspondence or in writing, I find no difficulty in so doing. In fact, I heartily believe in the movement of the Simplified Spelling Board, and think that it is the duty of all teachers to try to spread this movement abroad and make it known to the different people with whom they come in contact. I secured several copies of the literature of the Simplified Spelling Board and furnished them to the staff on the *Crucible*, and by that means enabled them to use simplified spelling. It seems to me in these days when the teachers are so progressive in other ways, it is too bad that so many of them should be so unprogressive as not to use simplified spelling. When you are trying to save time for children in other ways, why should you not save time in spelling? The children would not have to spend hours and hours in trying to master our language if really they ever do master it. For I think almost every one of us at times is inclined to make mistakes, even on forms with which we think we are perfectly familiar. I know that some people have strange ideas on simplified spelling. For instance, one girl picked up some of the

literature one day and said: "Now see, here is the word "hart" and the word "kist." Why that takes all the romance out of it. I don't like it at all." I want to say that I am heartily in favor of the movement and I hope that many people will take it up.

R. W. Corwin, M.D., Colorado Fuel & Iron Co., Pueblo, Colo.—I feel entirely out of place in attempting to talk to you about simplified spelling. I came here to listen to the discussion, and among other speakers, to hear Dr. Jordan, not with the intention of speaking upon this subject myself; and, judging from the condition of the air in the room you should be out of doors instead of confined longer in this atmosphere.

There is no doubt but that there is reason for continuing the old methods of spelling scientific names if we wish to consider the origin of words, but if we intend to simplify spelling, certainly we must consider it phonetically rather than etymologically.

A few examples will suffice to illustrate my point:

Pneumonia	Phlegm	Cheilitis
Phthisis	Cholic	Phenyl
Physic	Chloral	
Phesin	Chemolysis	

The last speaker said that we were dealing with a dead language. If that be the case let us bury some of the ancient ways of spelling and adopt a language more consistent with the living.

M. R. Kerr, principal, Union High School, Inglewood, Cal.—I am very much interested in this movement and feel that we are at point now where we can help the cause. If I should follow out my speech we would immediately become revolutionists, and then there would be trouble, but I thank you just the same.

David Felmley, president, Illinois State Normal University, Normal, Ill.—There is one point in connection with this meeting which it appears to me has not been touched upon, and that is that if we had more phonetic spelling we could have better pronunciation of the English language. As it is now, the pronunciation goes along one line, chiefly by ear, and the spelling along another line, learned by the eye. If our language was thoroly phonetic I think each would help the other. You know it is often pointed out that American people pronounce words as they are spelled, especially geographical words and other proper names, more than the English people do, because American people, having been pioneers, have studied oftener in solitude, without conversation with others, and so a very large proportion of our words come to us as in their printed form and we guess at their pronunciation. Last week I was in Yellowstone Park for a whole week, and we had ten men who went along in charge of the party. I talked a good deal with these men and I found that the leader was a man very widely read. He had read Herbert Spencer and a great deal of the best scientific literature of our generation, but his pronunciation was awful. He had a wide vocabulary and spoke well, but he had read those words in the long Idaho winters and had picked up that pronunciation. It brought home to me the truth—for I believe it is a truth—that if we had a better spelling we could master English better, speak it more distinctly and in all ways more beautifully than we do now.

DEPARTMENT OF HIGHER EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—James H. Baker, president, University of Colorado.....Boulder, Colo.
Vice-President—James A. MacLean, president, University of Idaho.....Moscow, Idaho
Secretary—Frederick P. Keppel, dean, Columbia College .....New York, N.Y.

FIRST SESSION—Wednesday Forenoon, July 12, 1911

The meeting of the department was called to order at 9:45 A.M. by the president, James H. Baker, president of the University of Colorado, Boulder, Colo. In the absence of the secretary, M. E. Deutsch, of the University of California, was chosen temporary secretary.

The department at once proceeded to the program set for the day, and the following papers were read:

"The Separation and Development of the Junior College as Distinct from the University," by C. A. Duniway, president, University of Montana, Missoula, Mont.

"The Relation of the College of Liberal Arts to the Professional and Practical Schools," by Thomas F. Kane, president, University of Washington, Seattle, Wash.

"The Building Up of Professional Education on a Collegiate Foundation from the Viewpoint of the Professional Schools," by David Starr Jordan, president of Leland Stanford Junior University, Stanford University, Cal.

The following Committee on Nominations was appointed by the chair, to present its report at the meeting of the department on July 14:

Thomas F. Kane, president, University of Washington, Seattle, Wash.
C. A. Duniway, president, University of Montana, Missoula, Mont.
A. Grant Evans, president, University of Oklahoma, Norman, Okla.

The department then adjourned.

SECOND SESSION—Friday Forenoon, July 14, 1911

The department was called to order at 9:45 A.M., President Baker in the chair.

A paper entitled "Some Phases of University Efficiency" was read by Alexis F. Lange, professor of education, University of California, Berkeley, Cal., and was discussed by Lewis B. Avery, principal of the High School, San José, Cal., and Abram Gideon, professor of modern languages, Colorado Teachers College, Greeley, Colo.

C. N. Little, professor of civil engineering, University of Idaho, Moscow, Idaho, presented a paper on "The Supply of and Demand for Engineering Graduates in the United States."

P. L. Campbell, president of the University of Oregon, Eugene, Ore., read a paper on "The Future of Intercollegiate Athletics in the Western States." The latter paper was discussed by J. C. Templeton, superintendent of schools, Palo Alto, Cal.; Thomas F. Kane, president, University of Washington, Seattle, Wash.; and C. N. Little, professor of civil engineering, University of Idaho, Moscow, Idaho.

The business of the department was then taken up. The president deplored the poor attendance, and urged a consideration of what could be done to make the department contribute most to the work it represents.

The Committee on Nominations reported the following nominations for officers for the ensuing year:

For President—Samuel Avery, chancellor, University of Nebraska, Lincoln, Nebr.
For Vice-President—John H. T. Main, president, Iowa College, Grinnell, Iowa.
For Secretary—Fletcher H. Swift, professor of education, University of Minnesota, Minneapolis, Minn.

The report was unanimously adopted.

The suggestion of the president was brought up by President Kane, of the University of Washington, who urged that a committee be appointed to consider means of enlarging the department's usefulness. Professor G. W. A. Luckey, of the University of Nebraska, moved that a committee be appointed by the chair to consider the time and place of meeting of the department, and also to discuss any modifications of its policy. The motion was adopted. The following were appointed to constitute this Committee on Policy of the Department of Higher Education:

G. W. A. Luckey, professor of education, University of Nebraska, Lincoln, Nebr.
Frank Strong, president, University of Kansas, Lawrence, Kans.
C. A. Duniway, president, University of Montana, Missoula, Mont.

On motion of President Kane, of the University of Washington, the department tendered the authors of the various papers read a vote of appreciation of their services.

The session then adjourned.

MONROE E. DEUTSCH, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE SEPARATION AND DEVELOPMENT OF THE JUNIOR COLLEGE AS DISTINCT FROM THE UNIVERSITY

C. A. DUNIWAY, PRESIDENT OF THE UNIVERSITY OF MONTANA, MISSOULA, MONT.

This paper is partly a report upon, and partly a discussion of, its topic —the separation and development of the Junior college as distinct from the university. On the principle of doing unto others as they do unto me, I have inflicted upon the presidents of all the state universities a *questionnaire* requesting information on present practice and especially on new developments of the year just closing. About three-fourths of the officers thus addressed have favored me with their answers. With collective acknowledgment to them for their courtesy, I make their letters largely the basis for my paper.

At the outset it must be recognized that the subject of the Junior college may be approached from several different standpoints. In some cases it may appear to be a device to relieve congestion caused by the influx of undergraduate students. The hope may be that the public high schools will develop into popular schools of the people, retaining their students thru a period of six years beyond the common schools; it may be a policy to encourage similar schools already in existence, generally under some denominational control, to put the emphasis of their work upon the thirteenth and fourteenth years of educational training. If

these steps can be taken, then the university, relieved from the necessity of providing for crowds of Freshmen and Sophomores, would give its best services to the persistent students who wish to pursue their courses to some professional purpose.

In other cases, the desire to develop separate Junior colleges has sprung from the avowed purpose to shut out from the university the too youthful, pleasure-loving crowd, who bring problems of discipline foreign to the interest of a scholarly faculty and their studious disciples. Only those persons should be tolerated in a university, it has been said, who have a definite purpose and a recognized ability to order their lives as responsible citizens in a free republic of science and letters.

The real problems of Junior colleges, however, lie deeper than the issues involved in such administrative considerations as have been just described. We have here something more than the need to relieve our great public universities from a part of their difficulties in caring for college students. We must test the value of Junior colleges, whether existing or proposed, by a judgment of their actual or probable educational service to young men and women between the ages of seventeen and twenty-one.

Will it not conduce to clearness if we attempt a definition of a separate Junior college—the particular variety of college institution which is the subject of this paper? A Junior college, then, is a college providing instruction and proper administration for the two years of higher education traditionally covered now by the Freshman and Sophomore years of the standard American college or university. Such a Junior college would not carry its students beyond the point thus assumed to be the goal of its work, while it starts its instruction with the usual thirteenth year of a course which presupposes twelve years of training extending thru elementary, intermediate, and secondary grades. We have then to consider whether the separate Junior college as thus defined, and as existing in more or less completeness in a few institutions, will find its proper place in our American educational system as a permanent and valuable feature.

The responses to my letters of inquiry develop the fact that the movement to the separation and development of Junior colleges has not made significant progress during the year just past. A long list of university presidents answer in effect that the subject has not been up for a serious discussion, and that no measures tending toward the establishment of a separate Junior college are in contemplation. A very few venture the opinion that the failure of their institutions to take any active steps toward the establishment of separate Junior colleges may not be indicative fo continued inactivity on this subject. They remark that progressive steps in the better organizations of higher education may possibly bring about something of the sort.

In a number of institutions, the past year has witnessed a considerable degree of attention to the better organization and administration of the

work of the first two years of higher education. One may recognize the effects of a current reaction against the administrative looseness of the free elective system. It is found in the practices of all too many college men and women—who are after all but boys and girls—with respect to their higher educational opportunities. With the characteristics of boys and girls, they are prone to take advantage of the possibilities of a free elective system by absorbing an intellectual diet of the greatest diversity, but not chosen with a view to intellectual good digestion and mental vigor. President Lowell took the lead in Harvard to bring about some regulation of the freedom of election hitherto enjoyed in that institution. His results preserve the integrity of the elective system quite unimpaired. Their practical effect is to give Harvard students advice and guidance in a system which remains essentially elective. Many of our institutions have been solving the same problem upon the principles of supervision thus adopted at Harvard—many of them, it should be added, having worked out their results before the cumbersome Harvard legislative machinery could produce its statutes on the subject. It is interesting to notice that the University of Kansas, with its system of group prescriptions, has worked out a system upon the basis of experience with Kansas students which is animated by a similar spirit. In the institution with which I am connected, the University of Montana, a group system, with quite close regulation of student propensities in electing courses, gave way two years ago to a system of restricted electives in the Freshmen and Sophomore years, which is strikingly like the system afterward adopted at Harvard, and for some time found in Chicago May it not be that right here is the distinctly valuable and relatively permanent contribution to educational organization produced by the suggestion of so-called Junior colleges? If Junior colleges are not to be extensively organized and separately maintained, we shall at least have the benefit of candid consideration of the needs of students in the first two years of their higher education. Systems differing somewhat in content, but very similar in purport, will prevail among our various institutions. The heart of such systems is the determination to have these college students make their choice of courses under expert guidance. In one method or another, each of the students will be put in charge of, and made responsible to, an appointed adviser. The faculty will define in general terms the fields of knowledge within which the adviser and his student should seek to arrange the student's course. The adviser as an administrative officer, acting upon the legislation of the faculty, will still have a considerable range of choice within which to assist the student in the election of particlar courses within the several departments. I imagine, and am practically willing to prophesy, that the older and more closely prescribed group courses of the typical New England college will be liberalized in this direction. I likewise imagine, and am ready to prophesy, that institutions which have been proud of

having elective systems will rapidly introduce some such administrative regulations as have just been described.

This paper might well stop at this point, because I have given, first, the substantial results of my inquiries on the tendencies and practice of the year just closing with respect to Junior colleges, and I have stated, second, my conviction upon the heart of the problem. I feel, however, that I should add, for the sake of completeness, some remarks upon other phases of the general subject. Probably all of my audience are familiar with the Junior colleges, such as organized in the University of Chicago, the University of California, and the University of Nevada. Here it should be noticed that there is not a complete separation and development of Junior colleges as distinct from the university. I believe I am right in asserting that these are but convenient administrative devices for the management of the first two years of higher education. A separate Junior college, to be really an institution bearing that name, should have a separate faculty, should have separate classrooms, should have separate equipment. The meeting in the same classroom and laboratory of students of Junior college rank and Senior college rank would not be permitted under a real separate Junior college system. The varying needs and attainments of university students, however, scarcely makes such separation possible, and if it were possible, the process probably should not be carried out. Between the ages of eighteen and twenty-two differences between students are much more a matter of temperament and of previous opportunity than of mere age, and certainly a younger man gains much from being allowed to work in the same classroom or laboratory with a man of a little more maturity.

There are not a few institutions calling themselves colleges and universities, and only half deserving their name, which are now tending, or are at least being urged, to become Junior colleges. Mostly, however, they do not deserve this new title, inasmuch as they receive into the same institution, and often into the same classes, students who have not finished their secondary training; then if they are able to hold them, they are more than willing to induce the students to remain beyond their fourteenth year of instruction.

The movement, which finds many advocates and some examples, to induce public high schools to give six-year courses, likewise seems to require notice in a treatment of Junior colleges. But if what has just been said is essentially right, then the mere prolongation of the work of a given high school to keep its students busy for six years does not really make of that high school a Junior college.

Finally, at the risk of inviting criticism by differing from many of my associates, I must record my opinion that the movement to mark a clear distinction between two parts of higher education at the end of the fourteenth year seems to me unsound and destined to have only a passing

vogue. When young men or young women reach the age of eighteen or ninteen years, it is time to recognize that most of them are ready to undertake a man's work or a woman's work. If they are in an institution of learning, this principle must be applied as it is applied in vocational life. Such students demand processes, points of view, and methods differing from those of the secondary school. I would not draw a hard and fast line at the thirteenth year of educational training, but that appears to be a reasonable point of departure, traditionally and psychologically, for the inception of mature work. The student needs more expert guidance by college officers and in the general provisions of university statutes than he will require two or three years later, but he should be essentially doing work with the motives of a mature person. In our professional schools this principle has sway. It should likewise control our educational policy in other departments. I conclude, therefore, with the statement that I see no reason to expect the separate and distinct Junior college to be a typical feature of American higher education.

THE RELATION OF THE COLLEGE OF LIBERAL ARTS TO THE PROFESSIONAL AND PRACTICAL SCHOOLS

THOMAS F. KANE, PRESIDENT, UNIVERSITY OF WASHINGTON, SEATTLE, WASH.

In this paper we are to deal with the relation of the college of liberal arts to the professional and practical schools. We shall interpret this subject as tho it read, "The College of Liberal Arts and Its Relations to the Other Schools of the University." Again, we shall look at these relations from the point of view of the college of liberal arts and we shall take the position that the observations are made primarily for the benefit of that college. We are assuming two years of training in the college of liberal arts for admission to the other schools, which is the standard set up by the National Association of State Universities and the Association of American Universities. Hence the relation of the admission from the college of liberal arts to the schools will not be considered in this paper.

Some of the relations to be considered are not so obvious as the ones just mentioned and so may not in the same degree force our attention. At the same time they are important in their influence on the college of liberal arts and affect vitally the service which that college is to render in the work of the university.

In the first place, the college of liberal arts, strictly speaking, is related to elements in its own organization that are not a part of itself. There are grouped under the name of the college of liberal arts, not only the college proper, but with it all the undifferentiated parts of the university. For example, the college of liberal arts has in its organization practically all the special courses that have been provided for women. The college of liberal arts should be relieved of this demand for work which is not

liberal arts work, but is in fact the work of departments that are to be for women.

On the other hand, women in co-educational universities should logically have the same provision made for their needs as has been made for the needs of the men. These departments should include such courses as training for teaching, household economics, training for clerical positions, for library work, for different lines of modern civic and philanthropic work, courses in music, courses in the fine arts, and other lines of special training for which there is a valid demand.

Not only should courses be provided specifically for women, but in every co-educational college of liberal arts there should be at least a small group of women teachers qualified on a par with their colleagues to serve as a nucleus of advisers and counsellors for the women students the same as the men teachers serve as counsellors for the young men. This provision at present is almost entirely lacking in the co-educational liberal arts colleges in the state universities.

Furthermore, the crowding of practically all the women in the university into the college of liberal arts creates a feeling that the college of liberal arts is a woman's college. The result is not simply that the college under these circumstances has the appearance of being a woman's college, but logically it must take on more or less of the nature of a woman's college. The remedy here is the annex of the older universities as Harvard, Yale, and Columbia, the separate department as recently established at Tufts, the plan of uniform segregation in the Junior college as at Chicago, the plan of separate sections of class work by election as at Cornell, or the plan followed in our university of allowing the departments to have separate sections in courses in which the work is at a disadvantage, either for the men or for the women, on account of mixed classes.

The plan of separate sections helps not alone in making liberal arts appeal more strongly to men as well as to women, but it will, in a large measure, do away with the growing prejudice against co-education. It should avoid a repetition of the experience at Wesleyan University. It is the way in the larger colleges of liberal arts to preserve co-education, at least in its best form.

Perhaps the best example of professional work in the college of liberal arts, in the average university, is the department of education. In our graduating class of 1911 in the college of liberal arts, of one hundred and forty-five members, seventy-seven, almost exactly one-half, took in our department of education the normal diploma, which is equivalent to a state teacher's certificate. This means that half of the supposed class of liberal-arts students were working for a professional degree, in addition to their liberal-arts degree, and that the work taken and the spirit of the work were determined, in part and perhaps in a large part, by the requirements for the professional diploma. In this way many of our col-

leges of liberal arts are almost teachers' colleges. The remedy here is that followed by the state university of this state in which we meet, in making the department of education a professional school and requiring a full year of professional training for its degree.

We assumed, in this paper, that the college of liberal arts is to furnish part of the preparation for admission to the professional and practical schools. In this relation, the college of liberal arts inherits one of the most perplexing problems with which the university and this association have had to deal, namely, admission requirements.

There are three steps which the college of liberal arts may take to better its relations with the high school. In our state of Washington, for example, students are admitted without examination to the university from schools put on the accredited list by the state board of education, of which the president of the university is *ex officio* a member. We may in such cases have the awkward situation that a high-school graduate is admitted to the university and yet he is not qualified to register unconditioned for any degree course in the university. The college of liberal arts, in such cases, may well make the adjustments by giving these students who have their fifteen acceptable entrance units the preliminary training they need to enable them to register unconditioned for the degree course which they wish to take.

Again, in our college of liberal arts there is required of all candidates for degrees work in all the larger divisions of knowledge. In each required subject, where the work is represented in the high school, there is a concession scheduled for the student who presents a specified amount of high-school credit in the work. This concession, altho it does not affect the total of the credits required in college, enables a student to do extra work in some subject in which his high-school credits were short.

Again, the college of liberal arts, having sole charge of these university relations with the high schools, may comparatively easily keep a duplicate set of records of its Freshmen, by high schools, and report to high-school principals, regularly or on occasion, the standing of their high-school graduates in college.

Hence, in serving as a clearing-house for the university, as it must serve under present organization, the college of liberal arts is spending part of its energies in the interest of its relations to the whole university and not for itself distinctly.

Again, with present university organization, departments of the college of liberal arts do the foundation work of the other schools, all of their courses that are not technically a part of the respective schools. These common departments are in organization assigned to the college of liberal arts, in its capacity of representing all the parts of the university not specifically assigned to some other college.

One essential thing is that the work for these various schools should

be done efficiently. There is no disadvantage to the work for the schools, so far as our university is concerned, in the present organization. The next essential point is that the influence of the college of liberal arts should be strong enough to keep the work in these courses from becoming too narrowly specialized and, in the end, not being so good for the special schools as a broader course more nearly like that given in the college of liberal arts.

Another essential consideration, from the standpoint of the college of liberal arts, is that the work for the liberal-arts students should not be determined in these departments by the technical courses, often attended by more students than the liberal-arts courses in the department, and that the liberal-arts courses should not be swallowed up by courses that are really planned for the professional or technical schools. In other words, the efficiency of the work in the college of liberal arts for its own students should not be reduced on account of other work incorporated within the organization of the college.

The relation of the college of liberal arts to the other schools of the university may change but its relation to the graduate school is fixed. It is the first story on which the graduate school builds its superstructure. This is a very important relation in its potential influences on the college of liberal arts.

The first essential here is that there be no confusion between the work of the college of liberal arts and that of the graduate school. It is not especially objectionable for the two classes of students to work in part together, but the work itself ought to be either graduate work or undergraduate work. If the relations are kept clear and distinct, the influence on the college of liberal arts of the graduate school should be highly beneficial. It helps to foster the spirit of scholarship and the spirit of investigation. It inspires the undergraduate to look forward to something beyond the bounds of the college. It is beneficial for the undergraduate to be in the atmosphere of scholarship and original work.

The disadvantage to the college from this relation to the graduate school may not have been so apparent. There is danger, in the first place, that the men formulating the courses for the undergraduates may plan courses that would be for the 10 per cent of the men who are going into the graduate school and only secondarily for the 90 per cent of the men who are not going into the graduate school. The courses, in other words, as in the case of the other schools, may be too much specialized and take away from the college of liberal arts the distinctive courses of that college.

Again, we have brought into the college of liberal arts methods of instruction and plans of work that are suited to the plans of the graduate school, but which do not give the best results in the undergraduate school. An illustration of this is the lecture method used now even with lower classes in undergraduate work. This is one of the most common causes

of poor work in the college of liberal arts. This will serve as an illustration of the bad effect that may come to the college of liberal arts from its relation to the graduate school. Its work and methods of work should be kept distinct and its purposes should not be thwarted by its relations to the graduate school or any other school.

The college of liberal arts is one of our largest colleges, the largest college in most of our universities. In our university, the enrollment (1910-11) in the college was 1,244, out of a total enrollment of 2,427, being in point of size half the entire university. If the undifferentiated parts in this college were differentiated, the college of liberal arts would be much smaller. It would still be representing the interests of more students than any other college in our university. Hence, provision should be made for this college in keeping with its importance.

The special purpose of this paper is to point out that the college of liberal arts should not be hampered by its relations. It must not be submerged by the undifferentiated work of the university. It must not have all of its energies used in its work as a university clearing-house. It must not have its courses determined by its service as a fitting school for the other schools of the university. These interests may be taken care of under the organization of the college of liberal arts, but this college must be left to its distinctive work, in the same way that the other colleges are allowed to do their specific work. Even in comparison with these services to the university generally, which have been enumerated, the greatest service of the college of liberal arts to the university will be thru its own distinctive work. It must do the work for the university which President Faunce points out has not yet been fully done, when he says:

> America does not yet really believe in the disinterested pursuit of truth, knowledge, scholarship. Hence, we have no scientists, philosophers, or writers of the first rank. If the universities surrender to the craze for immediate tangible efficiency, we shall be in evil case.

The college of liberal arts stands then for this disinterested pursuit of truth, knowledge, scholarship, and preparation for complete living. Toward the attainment of these aims it must first of all have inspiring teachers. Teaching in the college of liberal arts is more difficult than in the other schools of the university, for the reason that the ends sought in the work are less easily seen. The purposes of the college are not so easily grasped, especially by the mind in its earlier processes of training. Hence, from the needs of the college, the teachers should be among the very best in the university.

Its object is to make thinkers and persons of broad sympathies. The student becomes a thinker thru acquainting himself with the extended and advanced processes of thought in a limited number of subjects. On the other hand he should acquire a breadth of view and a breadth of sym-

pathy thru an outline survey of subjects in all the great divisions of knowledge. A student with us, having half the work of his course specified in group requirements, concentrates his efforts thru at least three years continuous work in his major department and he is given an acquaintance in all the other main divisions of knowledge by group requirements in all these divisions.

With the object of the college of liberal arts to fix habits of mind and to make thinkers, it must be understood that the manner of doing work is even more important than the ground covered. Hence, the University of Missouri is taking an advanced step when it puts a definite premium, in extra credits, on the excellence of work done by students and a discount on work with a passing mark that is still inferior in quality. Our college faculty has sought the same end by the regulation, not yet applied, that a candidate for a degree may count only a proportion of credits of the lower grades. Further than this, the scientific grading system, based on the average work of college students, should be adopted, especially in the college of liberal arts. Our faculty, thru a committee, has been testing department reports by this principle of grading for two years. It has exerted a strong influence toward uniformity of grading and toward giving the student's work a rating that has a definite meaning.

Again, as the college stands for the student's personal development, special emphasis should be laid on the fact that the student in the college of liberal arts must work. This end should be sought primarily thru the skillful work of the teachers, but in support of the teachers our faculty has the regulation that

> any student, who, in any semester, is reported as doing unsatisfactory work in more than half of his registered hours, will be dropped and any student who, in any semester, is reported as doing unsatisfactory work in more than one quarter of his registered hours should be placed on probation.

Furthermore, our examinations in the college of liberal arts are year examinations, with final examinations for graduation covering all the subjects taken in the major department. Again, in some of the large departments the questions for the examination for different sections of similar work are made up by the department faculty, as a committee, and the papers are examined by the instructors in the department who do not know whose paper they are examining, or the student of what instructor is being examined.

The work of the college, carried out earnestly to gain the chief ends of the college, will appeal to the student and arouse him to as serious effort as the schedule of any other college. The universities should favor in every way the college of liberal arts toward the attaining of these ends. It is to the interest of our whole people, as well as of scholars, that the college of liberal arts should be enabled to do its peculiar work, distinct

from that of all the other schools. This interest is pointed out by President Lowell, quoted with approval by President Finley (*North American Review*, 1910, p. 436), in these words:

> The college of the future has a great work to do for the American people—a college which can give freedom of thought, a breadth of outlook, a training for citizenship, which neither the secondary nor professional school in this country can give.

THE BUILDING UP OF PROFESSIONAL EDUCATION ON A COLLEGIATE FOUNDATION FROM THE VIEWPOINT OF THE PROFESSIONAL SCHOOLS

DAVID STARR JORDAN, PRESIDENT, LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

[*An Abstract*]

In the early days of the development of the European universities worthy of the name there were four departments, philosophy, theology, law, and medicine. Philosophy and the subjects associated with it have in many cases since come to occupy the main attention of the universities; theology has taken a special path that does not concern us now; while medicine and law, after a period outside of the university, are again finding their true place in it. German universities have set the pace for the educational world and have retained their intimate association with the so-called professional studies. In England, the universities are not universities in fact but only a number of schools collected together, the examinations of which are given under the direction of university professors. The relations of these colleges to science have been ridiculous, while their relations to philosophy and general education have been very noble. Chemical laboratories are almost absent from the colleges of Oxford, and one that I saw there was not so large or as well equipped as the one in the little village of Palo Alto. The ideal of developing gentlemen by teaching them things that were perhaps cultural but not practical or useful has had much to do with the attitude of many of the English, who either do no work or work looking forward only to the time when its rewards will place them where they do not have to work. Engineering was the first truly modern profession because the foundation for it had to be laid soundly, and while a physician could perhaps hide his ignorance or mistakes and a lawyer get behind the intricacies of the law, the natural forces confronting the engineer had to be met by accurate knowledge, accurately applied, and the results were obvious to all. In England much of this teaching has been in the hands of the various city universities and has not been a part of the greater and older seats of learning.

In this country for many years the education of the lawyer and physician was most unsatisfactory. In law the student often read law in some offices where he handled minor cases and ran errands and gradually ac-

quired some insight into the forms of legal procedure. The lectures given in the various law schools with which he at times supplemented his work, were, except where some rare mind filled him with inspiration, of little real value. In medicine the conditions were similar. There seemed to be no good way to give medical education, so physicians banded themselves together into the so-called proprietary medical schools. At first it was an organization founded upon love of the profession, but in many instances an institution founded upon such love drifted gradually toward advertising its faculty in various ways. Besides, medicine became a most difficult profession, requiring years of expensive laboratory work in preparation for it. Not many years ago there was no science of bacteriology, no microscope, no understanding of the chemical processes of the body. Since the human body is the most complicated chemical machine known, the physician must know much biology, physiology, and chemistry in order to attempt to interfere with it. At best he can only hope to direct or control it, for the days of specific drug therapy of disease have largely gone by. Except for a few striking exceptions, such as the lethal effect of quinine upon the malarial organism, the most that can be done is to modify by drugs the natural body functions and reactions, by producing one effect, modify another. With medicine always upon the firing line of advance, depending upon all that has gone before and even penetrating into dark corners, it is especially important that it should be intimately associated with our universities. The foundation work required for it has become so much more elaborate and so expensive that only universities can properly handle it. The principal duty of the university is to set standards and in no other field of knowledge is this more important than in medicine.

About twenty years ago Johns Hopkins University Medical School was founded in Baltimore to further the teaching of medicine in the United States and bring it to the level of the German universities. One of the first requirements that it exacted from the prospective student was that he was to have a degree from the liberal-arts department of some accredited university. This brought the standard above any medical college in the country. This was the first step that was taken in this country to eliminate the proprietary medical school, and the other universities had to follow the lead of this action, until at the present time every reputable medical college in the country demands that the student have at least an education sufficient to understand what he is being taught.

Harvard, Cornell, Pennsylvania, Columbia, Washington University in St. Louis, have with others followed along the lines laid down by Johns Hopkins to bring the medical schools back into true university ways, for teaching medicine and law is a true university function. If the universities graduated only one hundred physicians or lawyers of the right stamp it would be better than to have a great number of poorly trained ones turned loose upon the community.

An education in the liberal arts is not sufficient foundation for any university to attempt to teach medicine upon. Chemistry, biology, physics, and German or French should be taught to the student who is about to enter upon a medical career before he enters a medical college. With this foundation and a four years' course in a first-class medical college he will be prepared to minister to the needs that are demanded of him.

The requisite preparation for the four years of medical instruction should be, then, three years of university work, about two-thirds of the time of which should go to the sciences upon which medicine is based and the languages which one needs to study medical literature, and about one-third to courses of liberal arts. In law about the same amount of basic preparatory work should be done before the three years of actual law study leading up to the Juris Doctor degree. Only so can the lawyer become an expert in justice, for that is what he should be. University training is practically requisite for the ordinary man in order to grasp the great basic principles of the law and to become a real expert in equity. Universities should recognize their duties to professional training and take back medicine and law and make the degrees of Doctor of Medicine and Doctor of Law correspond in university importance and in training with the Doctorate of Philosophy.

SOME PHASES OF UNIVERSITY EFFICIENCY

ALEXIS F. LANGE, PROFESSOR OF EDUCATION, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

"Lest we forget," we do well now and then to remind ourselves—and others—that a university is not a formula of Pure Reason nor a soulless mechanism, run perhaps for revenue only, but a social institution. As such it consists, in any given instance, of a living group of human adults and near-adults functioning together as a social organ. Its members, with their co-operative plans and practices, belong to a definite day and generation of a particular people, which thru them especially expects to lead and be led, to safeguard its cultural identity, and, more or less rationally, to mold its own future. Only the dawn of the millennium can usher in a world university. Until then, whatever essential type-marks set off universities from other social agencies, each university is at least a national variant—if not a "sport"— and even as such a variant need not be the twin of any other in order to function wisely and well. It follows, of course, that the directive ideas and ideals include those bearing particularly on the institutional as a phase of the national life. Ideally, an American university exemplifies American democracy, not only in its dealings with the world's heritage of knowledge and human aspirations and in training young men and women for making a life and a living on the highest plane, but also, and chiefly, in constituting an educational environment most

clearly and fully expressive of the faith in which the nation is built. Ideally, American academic citizenship conforms to the highest type of American citizenship in general. Ideally, the spirit of the university, university spirit, public spirit, patriotism, the spirit of social service, are only different aspects of the same thing.

While obvious, the implications of this organic conception will bear emphasis. One is that a university, like an individual, grows efficient as it ceases to "muddle along." It must know itself and its place in the body politic. The institutional sense due to use and wont needs to develop into the institutional consciousness that springs from insight into the laws of social progress and from the endeavor to organize and realize a correspondent system or hierarchy of aims. Another implication is, of course, increasingly aimful self-direction, which will involve more or less radical modification of the institutional adaptations of means to ends which have come down from the past. And growing thus by self-directed outgrowing implies self-management. No university can be efficient in a state of tutelage. Its conduct must be determined from within. Efficiency covers both being and doing. It is this sort of self-direction and self-management that constitutes academic freedom.

Again, the university being a social organ, its attitude toward itself and the highest utilities of the nation cannot—from the viewpoint of efficient functioning—be that of either standpatter or revolutionist; but must be that of the practical evolutionist.

Lastly, just as according to Lowell a republic can be truly successful only if every citizen is in some measure a statesman and thinker, so a republic of letters cannot fully realize itself if university consciousness, if the self-directive force, if the evolutionary attitude, are attributes of only one man or of an oligarchy. The more efficaciously the whole system of university aims works in the mind and heart of each member of the university group, the more truly will the leaders be leaders and the sooner will the solution be found of the problem of keeping abreast with and in advance of the society of which the university forms a part. I say "in advance of," because no progress is possible if a university tries merely to satisfy a popular demand, instead of endeavoring to discover what is needed and then to persuade the older as well as the younger generation of contemporaries to want what they need. As compared with the schools below it, a university, it should be added, is in an exceptionally fortunate position to further that teamwork which is the ideal resultant of institutional consciousness, self-direction, and self-management, because the majority of its members are of age and can understand and attain to the attitude and conduct that square with university purposes, cultural, vocational, civic.

It is from this point of view and by the criteria immanent in the university as society's organ of leadership that efficiency must be tested.

Outside standards are manifestly for the most part inapplicable. The main question always is: "Is this particular university self-directing its development efficiently?" To answer it the comparative method alone will not do. Piecemeal comparisons as to government, administration, teaching, research, student life, etc., are inadequate to safe generalizations unless made in conjunction with an all-around examination of all of these factors in their connection with the institution's own historical and social setting. One reason why it is at present rather absurd either to affirm or deny that American universities are efficient, is that complete critical reviews of this sort are as yet among the things hoped for but not seen. Most of the current criticism of university conditions is partial, or partisan, or impressionistic. Its value lies in promoting institutional introspection and constructive self-criticism.

In view of this situation the safer course plainly consists in indicating by the light of the foregoing conceptions a few next steps, some nearer and remoter goals of self-directed effort toward greater efficiency. In doing so I shall often refer to the university I know best, without losing sight, I hope, of the representative values of such references.

The first need, country-wide, is obviously to endeavor with might and main to clear up the present confusion of ideas concerning university and college aims. As long as this confusion lasts the university house will be divided against itself. Owing to a course of development too familiar to be rehearsed here, American universities, the state universities without exception, have become university-colleges. And the union of the two types of institution is thus far rather mechanical than organic. Moreover, the tendency is to subordinate the cultural or man-centered aim of the traditional college of liberal arts to the work-centered or professional aims of a German university. My conviction is that an organic union of purposes and types of organization can be effected and is being effected, not, however, by relegating all professional training to the graduate school, nor by maintaining any other rigid line of demarkation. Practical, and theoretical considerations no less, favor a pretty thorogoing dovetailing. The vocational training which is only that can never be as fully efficient as one which allows ample opportunity for personal culture. It is not only too early specialization that defeats itself but all specialization that absorbs the whole man. Wherever professional training begins—and this includes training for research—breadth of outlook, richness of ideas and sympathies, and an all-around appreciation of the forces of civilization, including the specialty, must not be sacrificed, if the nation is to have leaders. Hence the desirability of what may for short be called college courses, even in the curricula of all professional schools. On the other hand, college aims are one-sidedly carried out unless the student realizes thru actual training in the foundation disciplines of a profession what modern scholarship means to modern civilization. At the University of California such

considerations as these have led to a reorganization in which the man-centered college aims are meant to be uppermost during the first two years. These two years are supposed to be sacred to the student's further enlargement of his outlook and to his endeavor to find himself. From there forward the emphasis is supposed to shift to progressively work-centered or professional pursuits. Beyond the Bachelor's degree come the courses devoted largely to the mastery of professional applications and technique.

Practice does not, of course, always follow closely on the heels of policy. But when these organic adjustments are complete, the lines of articulation will be diagonal rather than horizontal. Professional training will appear not mechanically superimposed on either the middle line of the old-time college nor on that fixed by the Bachelor's degree, but organically adjusted as a new branch is grafted slantwise into the stem of a plant. The traditional Bachelor's degree becomes thus not less but more significant as representative of modern liberal culture, as representative of the union of efficiency of being and efficiency of doing.

But a university will not improve its efficiency by reshaping and correlating anew merely its own structural parts in accordance with the organized purposes of a university-college. It functions at its best only if vitally adjusted to and correlated with the high school, indeed every other part of the state's educational system. Guided by this principle and its corollaries, the University of California has reshaped its entrance requirements with reference to the beginning of the Junior rather than the Freshman year. While thus the university in the narrower sense rises from and out of the middle of the traditional four-year course and extends upward by organic transitions to the various professional termini, secondary education by equally organic transitions extends, at least is meant to extend, without a shifting of aims or emphasis or radical change of methods, to the same median points marked by what is known as the Junior Certificate. As a part of the same policy, the university has strenuously supported a professional standard of preparation for high-school teaching, which in California calls at present for at least a year of graduate training. Furthermore, the university and the normal schools of the state have arrived at various methods of co-operation which are furthering, in increasingly effective ways, the solidarity and efficiency of the whole teaching body.

As an integral part of the same policy, the university has for more than a decade urged the upward extension of the four-year high schools, not only as a means of checking the hypertrophy of its lower classes but also as a method of extending the reach of secondary training. Many more than at present would be enabled to continue the formal educational process to the very close of adolescense. Fewer by far would have to be satisfied with a secondary course which not only begins too late but stops too early as well. More important still in its bearings upon efficiency is

the fact that by making the additional two years not only a cultural connecting link with the upper division of the university but also and especially a final vocational opportunity, a bridge from school to life would be constructed for thousands that now either receive no vocational training or else are misdirected by way of the university into professions in which they will always be misfits. Not less than 25 per cent, I believe, of university students consist of those who should, and probably would, never have entered if a vocational school had been open to them, more advanced than that based on the grammar grades or perhaps on two years of high-school preparation. We should thus assist, on the one hand, in making the school system a better selective agency for efficient social service, and should, on the other hand, relieve the university of students intended for life-work just as noble but different from that for which a university prepares. Such reorganization, I would add with emphasis, does not involve the extinction now or in the future of the lower division of the university-college. It would mean simply smaller and presumably better-selected Freshman and Sophomore classes. It does involve, of course, standards of scholarship for such high-school teaching equivalent to those maintained for college work.

These adjustments of aims, leading to a more perfect union of now frequently conflicting college and university purposes, and the structural adaptations necessitated thereby, raise the question of efficient instruction and scholarship. It seems clear that the present method of training and selecting the university staff must be modified. In my judgment no single factor would make more for efficiency than a functional differentiation of professors into college and university professors without discrimination against either class as to honor, emolument, or position. No minute analysis of the present situation is required to reveal how the current one-sided emphasis on research and the training for research impairs the efficiency of the university. The newly made Doctor of Philosophy is usually the last person to be intrusted with the carrying out of college aims. In this respect our imitation of Germany has not gone far enough. In Germany the man-centered purposes of education remain from first to last in the hands of men of approved fitness. In the *Gymnasium* it is the most experienced and the most successful teachers that have charge of the work corresponding to that of the Freshman and Sophomore years, while in the German university it is not the young *privat Dozent* but the broadest and ripest master of his field who gives the lectures designed to orient the student on the basis of a coherent *Weltanschauung*. With us the same task devolves on young men presumably well qualified to lead broadly trained mature students up to and across the frontier of knowledge in fields in which these students are presumably seeking their self-realization as expert members of society. In other words, they are prepared to give vocational rather than college training. Their college work naturally often appears

to them in the light of a dull and dreary but inevitable preliminary to a professorship. A very common result is that they become neither good teachers nor productive scholars. Clearly, if they are to become the latter, the way must be opened for them during the earlier years of their service. And this is not done by making productive scholarship incidental. On the other hand, Freshmen and Sophomores do not get the guidance and discipline to which they are entitled. They should have something more adequate to liberal-culture aims. Nor can one escape the conviction that some method must be found whereby all candidates for a university career may be made thoroly familiar with the history, problems, principles, and present status of both secondary and university education. Their efficiency depends on whether or not they find themselves as college or university teachers and as university citizens with an intelligent grasp of the university organism as a whole and its relation to the larger social whole. From this point of view it must be admitted that our universities are not completely institutions in any organic sense. Often the tendency of evolution seems to be rather toward mechanical aggregates of mutually repellent particles.

It is often asserted, and as often indignantly denied, that university instruction is of poorer quality than that found in any other part of the school system. Both parties to the controversy, it happens, are right and both are wrong. If college teaching alone is considered, the charge cannot easily be refuted. If, on the other hand, the professional teaching of the university, the training for research included, is under examination, our universities will bear comparison even with the methods and results of German universities and with good teaching anywhere.

Closely connected with this matter of getting the best men for what each can do best is the problem of adequate working conditions. The central functions of the university demand the utmost economy of the time and energy of the teaching staff. Here more than one of the suggestions prescribed by business doctors may well be adopted, an increase, for example, in the staff of experts in routine administration. The staunchest upholder of faculty autonomy cannot reasonably object to methods meant to conserve the university teacher's energies in order that these may be concentrated on teaching and research. It is however equally desirable to realize that the legislative and judicial functions of a university by which the educational policy is determined and its execution assured and tested will not be exercised in a vital way unless each faculty member is given or finds his opportunity for service as academic citizen. Without this he is not likely to be a good citizen. Only by active participation in directing the evolution of the university can there be created what may be called intelligent university opinion. Only in this way can there come that institutional consciousness, that self-direction and self-management which will keep the university an efficient social organ. The more closely this ideal

is approached the less occasion will there be to fear university despotism or, what is worse, faculty oligarchies, and the more easily will that sort of social co-operation be reached which is perhaps best symbolized by the teamwork of a football team. The team is a unit. Each member of it understands the game as a whole. Each functions in his position—his specialty—as a part of the whole. Each contributes intelligently and loyally to the success of the whole. All follow the captain and submit to his decision because they want to win the game. This is said with all due regard to the distance between a university sheepskin and a university pigskin.

But if the university is to become an organic whole, clear-eyed as to its aims and sure-footed as to their execution, the student body must participate as fully as possible in the self-direction of institutional policies and life. The so-called student activities constitute a large part of the educational curriculum. They cannot and should not be eliminated. They should and can be brought into harmony with the central purposes of the university. What lends emphasis to this view is the newness of the university-college and its confusing transitional status. The students who underwent a college course fifty years ago could not escape the acquiring of the institutional sense. At present no two graduates need carry away coincident notions of their *alma mater*. Obviously such alumni are not in a position to assist intelligently in the preservation and further development of an institution that they know at best only in one of its multitudinous aspects. Sentimental loyalty, however intense and voluble, must always be inferior by many degrees to a rationalized loyalty rooted in a comprehensive view of the university as one co-operative body of professors and students. The university needs to interpret itself to the student, deliberately and planfully. Among the courses offered should always be one which would introduce the student to his *alma mater*, which would trace the development of his university, make clear its complex nature, explain what the president and the faculty are trying to do, reveal the relations of college to university aims and methods, and the functions of the whole institution as an organ of the commonwealth, and would bring home to the student his social responsibility. If this were done in the same spirit of sympathetic inquiry and criticism as that which is supposed to be characteristic of university teaching, such a course would tend to produce more helpful because more intelligent alumni. It would assist the student in finding himself. It would make for better citizenship within and outside of the university.

In corroboration I might cite the form of student self-government developed during the past decade at the University of California. Altho perhaps not very consciously due to such university policies and institutional embodiments as I have discussed, their shaping influences are never-

theless unmistakable. The obvious success of what has come to be known as Senior control is explicable only by a growing university consciousness. Its sanction is not derived from a written constitution but from a public opinion in accord with an intelligent conception of university development. Among the gratifying results two deserve special mention. One is that it has not been found necessary for the faculty and the president to deal in any but a formal way with cases of discipline, during the past three years. The other is that the student body is itself endeavoring to subordinate "student activities" to the central purposes of the university and to avail itself of these things not as by-products or side-shows—which indeed they are not in the larger view—but as legitimate, wholesomely socializing agencies.

The universities must plan for the future. Only by doing so can they justify their claim to efficient leadership. To do so effectively they must provide for social needs as soon as they can be provided for by organized courses of training. I would lay it down as a principle of efficiency that collectively and thru a sensible division of labor the universities must care for and should pioneer for all vocations that are rising or may be raised to the rank of a profession. The carrying out of this principle would seem to call at the present day, for example, for new departments or subdepartments of public health, of public and business administration, of domestic science, in so far as this stands for or can be made to stand for professions for women, and of education, as far as the teaching of applied science is concerned, in order that in this field too there may be leaders just as broad and scholarly and as expert as those in the older fields—ought to be. But what we need for such purposes is not a further vocationalization of undergraduate courses, but professional projections beyond the Bachelor's degree. For it must be insisted that university efficiency depends, in a large measure, on the number of young men and women who can and are willing to give sufficient time to the general as well as the professional preparation. Propaedeutic courses, however, I repeat, may well come in, in fact must come in, before the traditional graduation, as an essential aid to that potential efficiency which can legitimately be demanded of the holder of the Bachelor's degree. The university, no more than the secondary school, can increase its efficiency by becoming a trade school or by arresting the development of wholeness of manhood and womanhood.

This skeleton review has made it plain, I hope, that my conclusions are of an optimistic nature. All things considered, our American universities are more efficient than any other social institutions of the land. Their pains are for the most part growing-pains. They are steadily approaching that state which I have described as conscious, self-directed, self-managed; they are year by year worthier organs of leadership for the nation.

DISCUSSION

Abram Gideon, Colorado Teachers College, Greeley, Colo.—In conversation with the president of this department after the Conference in Modern Foreign Languages, over which I had the honor to preside, President Baker and I agreed upon the desirability of a division of the work of this department corresponding to that now obtaining in the Department of Secondary Education. There the program includes one or more sessions in which problems pertaining to secondary education are discussed. Then there are round tables or conferences, in which topics that deal with the subject-matter of the curriculum are treated. Thus we have in the Department of Secondary Education a round-table conference in English, one in mathematics, a classical conference, and a conference in modern foreign languages. Some such division would be advantageous in the work of the Department of Higher Education. One or more sessions could properly be devoted to general questions pertaining to administration, management, etc., while sections or conferences could take up specific subjects in the course of study.

Examination of the program of this department reveals recognition of the principle of division I suggest. All the topics discussed are problems of management, and the topic under discussion is specifically a problem of this nature. Moreover, the three officers of the department and at least three of the six speakers of the two sessions held are administrative heads.

However, the constitution of this program, according to which the administrative factor has received separate consideration, has not only an obvious logical basis; it has also a psychological foundation in consequence of which the administrative factor is accorded dominating emphasis. Efficiency of management in higher education appears to be the end and aim of higher education, if prevalent practice can be relied upon as a guide. This seems to be apparent not only from the make-up of our program this morning, but also from the life of the college. While we are not in other respects like the Pythagoreans of old, nevertheless we too are to a certain extent number-worshipers. When we estimate the efficiency of an institution of learning we give paramount significance to the roll of enlisted students.

In the same connection it might be asked whether the undue emphasis given to the administrative element has for the best influenced the relation of the faculty to the administration. Efficiency is a catchword current in modern days, but I suspect it had wide currency also among the ancients. Even Aristotle, in his hierarchy of causes, made room for something beyond and above an efficient cause, namely, a final cause. Not only How much? or How many?—but What for?—is a vital interest. Efficiency is meaningless unless we know the answer to the question, Efficient for what? If efficiency is secured at the expense of the independence of moral backbone of the members of the faculty in their dealings with the administration, then it is worthless. For such loss of virility will surely react upon the independence and moral backbone of the students. To my mind, there seems to be little ground for fear of the situation apprehended by the preceding speaker, the state of affairs designated by him as a "faculty oligarchy," at least so far as this country is concerned. Under the despotic age of presidents there is really more ground for fear of faculty emasculation.

Again, in the matter of emoluments, it might be asked whether executive ability, the condition of efficiency, manifests itself only in the office. What is questioned about higher institutions in this particular might also be asked with reference to principals and superintendents, as contrasted with the teaching force, the workers in the ranks. Is not grasp of one's subject or the control of the classroom, is not the ability to inspire a body of students in a lecture course or the gift of equipping young people to go out into the world and do their life's task—is not this as much a mark of executive ability as the work done in the office of the president, or the superintendent, or the principal? Why then the tremendous discrepancy between the compensation the one receives and that which the

other obtains? Why should there rest upon the brow of one a crown of thorns while upon the head of the other is pressed a gilded if not a golden crown?

Mr. President, I ask these questions with all due humility, not with any undue humility, but with becoming respect, for I am not an administrator and hence cannot presume to know intimately the technique or the mysteries of school administration. Nor can I appreciate, except with the aid of my imagination, the tremendous burden which it imposes and in return for which it is accorded so great prestige. I only help, in so far as I am able, to train teachers.

THE SUPPLY OF AND DEMAND FOR ENGINEERING GRADUATES IN THE UNITED STATES

C. N. LITTLE, PROFESSOR OF ENGINEERING, UNIVERSITY OF IDAHO, MOSCOW, IDAHO

A paper on the supply of and demand for engineering graduates must be statistical. It would seem to be a very easy matter to turn to those agencies which are actively engaged in collecting educational statistics for the facts pertinent to this inquiry, and having received the desired information, to base the discussion upon it.

The matter is not so simple as it seems, nor is it so easily disposed of as just indicated. I wished to know as a primary fact the number of engineering graduates in the United States for the school year 1909–10. In the first place what is an engineering graduate? A committee of the Society for the Promotion of Engineering Education, appointed in 1908, found that ninety-two institutions confer fifty-seven different degrees on engineering students who complete courses of three, four, or five (usually four) years of undergraduate study; and fifteen degrees for distinctively graduate work. In this paper I shall use the term engineering graduate to mean a student who has completed his undergraduate course of study and received any one of the fifty-seven degrees of the first-mentioned group.

In beginning this inquiry I sent to the United States Commissioner of Education and to the Carnegie Foundation for the Advancement of Teaching for lists of institutions in the United States conferring degrees in engineering in 1910, and for the number of engineering graduates from these institutions for the same year. Very courteously both sent replies and manuscript lists, which were not regarded, however, by their senders as complete. These lists have been of much service to me, and I wish here to express my hearty appreciation of my obligation for them; but a few days' work on files of catalogs in the University Library, and later an examination of replies by return-card postals, showed me that there is no easy road to even a small bit of educational statistics, and that such information as I had received must be carefully checked as well as completed.

In this country engineering was hardly recognized as a profession before the middle of the last century. The census of 1850 enumerated 512 civil engineers and surveyors in the United States. In 1870 this number became 4,703, which increased to 31,697 in 1880, and 43,239 in 1890. Now comes

a statistical jolt. The 1900 census gives for precisely the same class, namely civil, mechanical, mining, and electrical engineers, and surveyors 43,533 as against 43,239 in 1890. Whatever may be the explanation of this curious fact it is clear that the engineering profession is of comparatively recent origin and of pretty rapid growth.

With its development have come the establishment and growth of engineering schools, where young men can secure instruction in the principles of the profession. The Rensselaer Polytechnic Institute opened its doors as a school of applied science in 1825 and in 1828 gave lectures on surveying and engineering. This was the beginning of engineering instruction in schools in any English speaking country. The Sheffield Scientific School was opened at Yale in 1847 and the Lawrence Scientific School at Harvard in the same year. Michigan was the first of the state universities to offer engineering courses, which were begun in 1853.

In 1892–93 A. M. Wellington, author of that monumental work *The Economic Theory of Railway Location*, made a protracted investigation of the technical schools of this country, publishing his results in a series of forty-one articles in the *Engineering News*, of which he was at the time one of the editors. Upon the numbers of graduates given in his article in the *Engineering News* for August 4, 1892, Vol. XXVIII, p. 112, I base the following table of graduates per million population in the continental United States.

TABLE I

Graduates of Engineering Schools in Census Years

Year	Number of Schools Reporting	Total Number of Graduates	Graduates per Million Population
1840.....	1	13	.8
1850.....	3	12	.6
1860.....	5	31	1.0
1870.....	18	107	2.8
1880.....	41	226	4.5
1890.....	52	666	10.5

I find that in 1910, 118 schools reported 4,645 graduates or 50.5 per million inhabitants.

These figures show that during the past fifty years there has been an astonishingly rapid increase both in schools and in graduates. In the future the increase in schools will be slower. Over half the number now established are state-supported schools and there are not likely to be many more of these. On the other hand, I look to see the increase in number of graduates continue but not at such a rapid rate as in the recent past.

Considering this rapid increase in output of technical graduates the question is very naturally asked: Is it possible that the demand is increasing with corresponding rapidity? That the number of graduates is quite responsive to changing demand is made evident by studying Wellington's

chart of graduates for each year from 1860 to 1892, *Engineering News*, Vol. XXVIII, p. 113. The entering class for every year following a time of commercial depression shows a marked decrease. In the hard times following the panic of 1873 the number fell off fully one-fourth. These drops are quickly recovered when good times come again, and the rapid increase in numbers sets in anew.

I cannot hope to answer very confidently the various questions that cluster about the relation of the supply of graduates to the demand. I must be content if from one or another angle I can throw a little light upon this interesting subject.

Question 1.—How readily does an engineering graduate get a foothold which may lead to professional standing? Certain schools publish in every catalog lists of alumni by years, with their occupations. From the lists which include classes that have been out one year or less, it is possible to get some answer to the question just asked and from the catalogs of a half dozen representative institutions of good standing I have constructed the following table. Any engineering occupation no matter how humble is included in these numbers, for it should be remembered that a graduate is not an engineer, but the material from which an engineer may be developed in practical life. It is highly desirable that, on the practical side, he should begin at the foot of the ladder. Many men, at least in western schools, make this beginning in summer-vacation work, and have a corresponding advantage over their fellows on Commencement Day.

TABLE II

PERCENTAGE OF GRADUATES SECURING ENGINEERIN G OCCUPATIONS THE FIRST YEAR AFTER GRADUATION

Name of Institution	Place of Institution	Date of Graduation	Date of List	Number of Graduates	No. in Engineering Employment	Percentage
Stevens Institute of Technology	Hoboken, N.J.	1909	1910	83	71	83
Lehigh University	South Bethlehem, Pa.	1910	1911	126	110	87
University of Pittsburgh	Pittsburgh, Pa.	1910	1911	20	15	75
Case School of Applied Science	Cleveland, Ohio	1910	1911	68	59	87
Sheffield Scientific School	New Haven, Conn.	1910	1911	151	69	46
Armour Institute	Chicago, Ill.	1905	1906	48	43	89
Georgia School of Technology	Atlanta, Ga.	1909	1910	26	24	92

This table is sufficient to show that most engineering graduates find an opportunity to begin engineering work almost immediately after graduation.

Question 2.—What is the attitude of employers toward technical graduates? It would be easy to quote individuals of all shades of opinions, from those who will have nothing to do with engineering graduates to

those who make it a rule to give them the preference. I have sought for some indication of the estimate that employers put upon technical education in the columns of advertisements of situations open in three leading engineering papers, to see what percentage of advertisers either required or preferred as applicants men with an engineering-school training. In making this count I have omitted advertisements for foremen, salesmen, draftsmen, instructors of engineering, and those positions requiring investments of capital, as for obvious reasons these positions are not fairly representative, on the one side or the other of this question.

In the *Engineering and Mining Journal,* from January to June, 1911, 20 per cent; in the *Electrical World,* from January to July, 1910, 23 per cent; and in the *Engineering News,* from July, 1910, to June, 1911, 35 per cent of the advertisers either required or preferred technical education.

Perhaps the individual opinion most interesting to me is that of Mr. Frederick W. Taylor, known to engineers as the man who after a lifetime of experiment has completely revolutionized the art of cutting metals. In a contribution to the discussion on the relation of education to industries at the meeting of the American Society for the Promotion of Engineering Education, held in New York, June, 1909, Mr. Taylor, who has been a large employer of engineering graduates, said that ten years before, he made up his mind never to employ, if he could help himself, graduates who had not been out two years at least.

A part of his explanation is, that up to graduation the student has the attitude of a sponge or absorber; when he begins to do things the process is reversed and he finds the squeeze painful; it takes about two years for the graduate to accustom himself to this reversal of function, and during this time his employer and himself are mutually dissatisfied.

In 1909, Professor Diemer, of Pennsylvania State College, reported that of 122 manufacturers of machinery, each employing over 100 men and having had experience with technical graduates, 98 returned answers to the question "Have you found technical graduates satisfactory?"—which he summarized as follows: "affirmative, 60; undecided, 15; negative, 22."

In civil engineering and surveying there are many subordinate positions into which graduates drop without friction; if these graduates have had practical experience in summer vacations the positions that may be obtained are well paid. From $75 to $100 per month, and expenses in the field, are freely paid to such graduates in the West in prosperous times.

On the other hand, Dr. Waddell, the eminent consulting engineer, of Kansas City, has said that in the office of a civil engineer who is doing a large amount of practical work the new alumnus is worth less than nothing; he argues that even an unpaid place in such an office will ultimately prove more profitable to the new graduate than a well-paid position lacking the opportunity for a broad experience.

It is clear that a real objection exists in the minds of many employers

to some engineering graduates for a year or two after graduation. Those who have had the most experience with technical graduates, however, would agree with Mr. Taylor and Dr. Waddell as to the ultimate value of engineering-school training, when it is supplemented by practical experience in the shop, field, or office, either before or immediately after graduation.

As to Mr. R. T. Crane's condemnation of every form of instruction beyond that of the common school, an examination of some of the things he has written discloses such a bias and narrowness of mind as to make it unprofitable to discuss his opinions.

Question 3.—Are engineering graduates successful? To answer this question I can turn to two careful investigations. In each case they include practically all of the graduates of a technical school where the number was sufficiently large to warrant general conclusions.

Professor Furman has published in the *Proceedings of the Society for the Promotion of Engineering* for 1908, Vol. XVI, p. 307, his investigation of the records of the graduates of Stevens Institute of Technology, at Hoboken, N.J., a leading school of mechanical engineering. The number of graduates, including the class of 1908, is 1,394 men.

Two of the conclusions are the following:

1. The graduates rise rapidly into positions of responsibility. Nearly 50 per cent of the graduates then living are classed as successful at the end of five years after graduation, 90 per cent reach success after fifteen years, and 98 per cent after thirty years.

2. An apprenticeship course of one or two years immediately following graduation has proved itself a sure road to eminent success in later years.

The second investigation was made by Dean Cooley and Professor Moyer of the University of Michigan. It was published in the *Proceedings of the Society for the Promotion of Engineering Education* for 1909, Vol. XVII, p. 179. It consists of two parts. The first part is based upon annual letters from 1,234 of the 1,289 living graduates in engineering of Michigan University, including the class of 1907.

I have copied Table III, p. 182, of the article quoted which shows the percentage classification of living graduates by five-year groups.

TABLE III

PERCENTAGE CLASSIFICATION OF LIVING GRADUATES BY FIVE-YEAR GROUPS

	1878–82 Inclusive	1883–87 Inclusive	1888–92 Inclusive	1893–97 Inclusive	1898–02 Inclusive	1903–07 Inclusive
	Percentage	Percentage	Percentage	Percentage	Percentage	Percentage
Responsible positions	94	93	84	65	52	24
Non-responsible positions	3	5	14	32	45	69
Retired	..	..	..	1	1	..
No record available	3	2	2	2	2	7

In making out this table a graduate was considered to occupy a responsible position whenever his work was of such a character as to require him to exercise his own judgment rather than follow that of another.

It would hardly seem possible to bring forward more striking or conclusive evidence as to the ultimate success of engineering graduates than that afforded by these thoroly reliable investigations.

The second part of the investigation of Michigan University engineering graduates is concerned with their salaries and total incomes. This information is based on returns of unsigned cards from 980 of the 1,234 graduates who regularly gave information for the university record of graduates.

It appears that for the first year after leaving college, the average annual salary is a little more than $900. A steady and fairly uniform increase is shown each year for fifteen years, at which time the average salary was between $4,300 and $4,400. If a few very large salaries of men who have been out from fifteen to twenty years were eliminated the increase would be fairly uniform up to $6,000 at twenty years. After twenty years the average annual salary was about $5,600.

Question 4.—To what extent do the graduates from engineering schools follow engineering as a profession? Professor Furman in his investigation of the careers of graduates of Stevens Institute of Technology reached the following conclusion:

Forty per cent reach executive or managerial positions, nearly all in engineering or commercial manufacturing lines; 37 per cent, broad technical positions such as consulting engineers, etc.; 11 per cent settle into positions calling for technical detail; 10 per cent go upon the retired list, and the occupations of 2 per cent are unknown.

Dean Cooley in the article cited above gives the occupations of 1,378 engineering graduates of Michigan.

Including professors, presidents of corporations, managers, and superintendents, 73 per cent are in occupations for which the university training of the graduates may be regarded as direct preparation.

Other institutions, notably the Massachusetts Institute of Technology, at Boston, publish tables of occupations of graduates. A study of these lists discloses the fact that a considerable number of graduates do not adhere closely to the professions corresponding to their undergraduate courses. I regard this ease of adjustment to environment and opportunity as an evidence of the breadth of their preparation rather than of defect in their undergraduate courses.

Obviously education and schooling are two things not necessarily joined and it is freely granted that one may obtain the former entirely apart from the latter. Nevertheless it is clear that in most cases a school training is a wise investment. As Henry L. Doherty, a prominent manager of electrical properties, has put it, such an education backed up by proper practical training is a capital that cannot be spent or mortgaged and may often be made to have an earning power of $500,000 in cash.

Question 5.—Do engineering graduates have an advantage over non-graduates? In the *Engineering News* for 1902, Vol. XLVIII, p. 112, an editorial note quotes from the *Report* of William Barclay Parsons, chief

engineer of the Rapid Transit Commission of New York City, the following table:

TABLE IV

PERCENTAGE OF GRADUATES AMONG EMPLOYEES OF THE NEW YORK CITY RAPID TRANSIT COMMISSION

	Graduates of Technical Schools	Non-graduates	Percentage of Graduates
Chief engineer	1	..	100
Deputy chief engineer	1	..	100
Division engineer	5	2	71.4
Assistant	93	16	85.3
Rodmen	33	12	73.3
Axmen	11	19	36.6
Total	144	49	74.6
Omitting rodmen and axmen	100	18	84.7

All of these positions below the grade of division engineer were filled after competitive examination by the Municipal Civil Service Commission.

The editorial goes on to say that few engineers will dispute the value of a technical education and such figures as those above demonstrate that technical-school graduates succeed in obtaining positions in open competition with the men who have not had such training.

It would be an interesting question to investigate what percentage of the members of the different engineering societies of the United States are technical graduates. On the assumption that the members of these societies are successful practitioners, an answer to this question would give an indication as to what extent the possession of a technical education is necessary to success in the engineering profession.

For the American Society of Civil Engineers this was done in 1892 by Wellington, and his results were published in the issue of *Engineering News* for November 17, 1892. He included among the graduates all those who had taken over two years of the regular course at an engineering school. These cases were few. Of the total of 1,073 whose records on this point were available 55 per cent were graduates. It would be instructive to compare this percentage with that existing at the present time. The number has undoubtedly increased in view of the tremendous increase in the number of engineering graduates in the last eighteen years. I was not, however, able to get the necessary information. A letter from Charles Warren Hunt, the secretary of the society under date of June 21, 1911, reads as follows:

> It would be a large task to get the figures showing the ratio of members of this society who are graduates of technical schools to those who are non-graduates, and we have no statistics on the point. There is no doubt, however, that a very large percentage of our membership are technical graduates, but just what that percentage is I am unable to say.

I have shown that the phenomenal increase of engineering graduates of recent years continues in full force and amounts now to a yearly

contribution of approximately 5,000 young men who have been taught the principles underlying the engineering profession.

These graduates quickly find opportunities to add to their training acquired in the schools a practical experience gained for the most part in the subordinate posts of the engineering calling. It has been seen that their rise to responsible positions is rapid and that ultimately they achieve success in numbers that without proof would seem impossible. From these facts, and others deduced in the body of this paper, I conclude that the supply of engineering graduates has not outrun the demand, and that American education is to be congratulated on the present development of engineering instruction in colleges and universities.

THE FUTURE OF INTERCOLLEGIATE ATHLETICS IN THE WESTERN STATES

P. L. CAMPBELL, PRESIDENT OF THE UNIVERSITY OF OREGON, EUGENE, ORE.

That recent years show great improvement in the management of intercollegiate athletics, there can be no reasonable doubt. Faculties and students alike have been squarely facing the serious problems which beset them in the development and control of athletic relationships both within and between colleges, and the good results have come with most gratifying rapidity. Faculty and student athletic conferences have sprung up all over the country, such as the Intercollegiate Conference Athletic Association of the Mississippi Valley States, the Missouri Valley Conference, the Southern Intercollegiate Athletic Association, the Rocky Mountain Faculty Athletic Conference, the Pacific Northwest Conference, and many smaller organizations in which but two or three universities are concerned. A still more important movement has been the organization of the Intercollegiate Athletic Association of the United States, in which seventy-one colleges and universities, enrolling over one hundred thousand students, have membership. The rules adopted by these conferences, pretty generally much the same both in spirit and in letter, have happily resulted in freeing college athletics from at least the grosser abuses to which they were subject in the old days of undisciplined rivalry and go-as-you-please methods of securing invincible teams.

The amateur standard has been pretty clearly defined, and is now very generally accepted, in practice as well as in theory. Bona-fide student standing, of honorable grade, in courses leading to a degree, is required, and the number of years of participation in athletics is limited to a maximum of four. In many colleges, Freshmen are barred from intercollegiate contests, and in practically all the reputable colleges a student coming from another institution is not allowed to play the first year. The "tramp athlete" is pretty well put out of business, and the man who is in college

for athletics alone, cannot, under the new scholarship requirements, remain long on the team. Best of all, the spirit of pure amateur sport and the standards of sportsmanlike conduct are gaining such a widespread and controlling influence among college students that semi-professionalism and unfair advantage in competition cannot hope to find any considerable measure of even secret support.

It is quite true that there are some serious problems of college athletics yet to be solved, but they are not in the main of the unhappy nature of those which confronted the reformers of a decade ago.

Passing by questions of schedules, of expenses, of training-tables, and the like, most of which are already well on the way to settlement, and all of which can easily be taken care of when the more important matters have been adjusted, it may broadly be said that our problems in athletics from now on will be of the large, constructive type. They are essentially the same, both West and East.

The first of these problems is to secure for the Department of Physical Education the same recognition and support as that given to any other department of the university; and the second is to make athletics effective not only as a physical discipline, but as a great moral discipline as well.

Toward solving the first of these problems, the University of Chicago took a long step when it gave the rank of full professor to the head of the Department of Physical Education. Very recently the University of Wisconsin has gone still farther, by making the election of all members of the department a matter of board action, with assignments of rank the same as those made in other departments.

The salaries are all paid from the general university funds, and are in no way connected with the receipts from the university games.

The university recognizes the great educational value of the work of the department, gives the department equal rank with the other departments of the university, and provides it with adequate and dignified maintenance.

Most of our Western universities have taken athletics more or less under direct university control, and have granted more or less of recognition in the way of academic rank to the director of physical education; but they yet have a considerable distance to go before they reach the high mark of appreciation and organization of physical education set by the University of Wisconsin.

It is in this direction, in my judgment, that we must move more vigorously. Large and dignified organization, full and generous recognition in academic rank, and the high aims to which the department will be directing its efforts, will attract in rapidly increasing numbers the most effective and desirable type of men into the direction and control of the athletic activities of the universities. There, as everywhere else, it is personality that counts. Men of high ideals and broad views, thoroly well prepared

for this work, and fired with a missionary zeal to make physical education a means of spiritual grace as well as of physical strength, could enter on such a field of influence and achievement as is granted to but a favored few in education.

First of all, they would include within the range of their work every student of the university, and not leave athletics as the special interest of the few who are being highly trained for places on university teams. Intra-collegiate, instead of intercollegiate, sport would come to be the broad basis of athletic organization and development. Already interclass, inter-club, and various other forms of "scrub" games, which enlist the interest and energies of all types of university students, are growing in popularity, and are stimulating the physical activities of multitudes of students who formerly were content to limit their exertions to the "encouragement" of 'varsity teams from the bleachers. All this means the healthy exercise and wholesome relaxation of "free play," instead of the grinding work and the nerve-exhaustion often attendant on 'varsity practice. These voluntary activities need simply to be encouraged and directed in order that they may become the highly effective laboratory practice for the systematic instruction given in health and hygiene. Carefully planned and scientifically accurate courses in theory should constitute the directing influence back of all forms of college athletics. Here we reverse the formula, and say that students should know as well as do. Nor should they be limited to theory on the purely physical side; but efficiency, courage, cheerfulness, and generosity in the large sense of the word, are some of the ideals in which they should be instructed and toward which they should be trained.

The growth of the intracollegiate sports need not be at all at the expense of interest in the intercollegiate contests. On the contrary, out of the great wealth of material furnished by the class and club teams, many more legitimate aspirants to 'varsity honors may be discovered than at present, and a keener and more intelligent appreciation of the fine points of the great games may be developed thruout the student body. The real enthusiasts are those who know the game by playing it. Quickness of thought and decisiveness of action will gain in premium thru the instant recognition which they will command from a body of semi-experts. There will be a real incentive to the highest type of skill, based upon headwork and swiftness of execution rather than upon sheer weight and brute strength. The game will take on more of the lightning-like rapidity of expert sword-play, and the trained body will become the perfect instrument of the quick intellect and the determined will. Our 'varsity games are now too often heavy and slow: a properly educated body of "rooters," themselves keenly aware, thru personal experience, of the "values" in the game, would soon bring up the standard of play to a point seldom now attained.

While the quality of the intercollegiate games would become better,

the number would be held easily in control under the management of a university department. Excesses of all kinds could be avoided, and the danger of athletics becoming an unduly dominating college interest, to the detriment of the time-honored ideals of scholarship, could be averted. In the hands of responsible members of the university faculty, athletics would be made to serve their true educational purposes, and to keep a right proportion in university life.

But the question may be asked whether this formal and serious taking-over of athletics by the university will not kill the old interest which was so keen in university sports when they were under the exclusive promotion and control of the students themselves. Sport is sport, some one may say, and it loses its characteristic hold the moment it is turned to serious account for tiresome educational purposes. When we work, let us work; and when we play, let us play.

Undoubtedly this indictment of university control of athletics would be apt to be a just one if the Department of Physical Education were so stupid as to try to secure results without recognizing in this very factor of student interest the most important one of its whole problem. It must be skillful enough to seize upon natural interests in sport and stimulate them by providing right conditions, rather than impose new tasks in the form of games required or exercises set by the department. It must practice above all other departments the fine art of co-operation. It must encourage voluntary organizations of all sorts, and help to find times and places for the working out of schedules planned by the students themselves. It must be wise enough to make the student forget the seriousness of purpose while the game is on. Sport must still be sport, if it is to retain the values which came to it thru the sense of relaxation and the sheer joyousness of physical activity.

And herein lies the necessity of wisdom in the selection of the directing head of a department of physical education. He must himself be skillful in management, and he must know how to select assistants who are expert in practice. One supreme virtue, at least, was found in the rough-and-ready management of athletics under student control—the coaches were judged by the uncompromising standard of getting results, and there was no uncertain ring in the demand for the removal of the incompetent. What marvels of high skill in training and whole-hearted devotion to the interests of their teams many of these coaches have been! Is it any wonder that athletics under their direction have too often claimed too great a share of student energy and enthusiasm! While the selfish and narrow motives which, it is claimed, actuated the old-time professional coach, must be eliminated, the standard of real efficiency must be retained, if the coaching is to continue to command the respect and confidence of the men. The danger of all departmental work is that of falling into ruts, and retaining men after they have allowed themselves to fall below their

own best standard of efficiency. The new system of control must be as free from this danger as was the old—and it can be made so under good administration.

But departmental direction of athletics does not by any means necessarily exclude student participation in the selection of coaches and planning of schedules. A student athletic association should be maintained for the promotion of interest in athletic affairs, and special committees of the association can work to good advantage, in an advisory way, with the members of the department in all matters affecting the general athletic welfare. Already the University of Wisconsin is finding its way safely thru whatever difficulties may arise from departmental control of athletics, and so far no note of doubt or disappointment has come from the administration.

The second of the constructive movements of which I have spoken, that of making athletics a means of moral as well as of physical discipline, is closely connected with the first, and should follow easily from it. Dr. Parkin, secretary of the Rhodes Scholarship Trust, says that William Stead believes the athletic count in determining the winner of a Rhodes Scholarship was meant by Rhodes to amount almost to a religious test. Rhodes had in mind, according to Stead, not only physical strength and athletic skill, but even more clearly all the fine qualities of good sportsmanship to which the boy of the great English schools, such as Eton and Harrow, is trained. If the father of the captain of one of the cricket teams engaged in the great annual match between Eton and Harrow were watching the play, he would be more concerned, says Dr. Parkin, in the sportsmanship shown by his son than in the outcome of the match. Would the boy keep his temper under all conditions; would he yield instantly to the decision of the officials; would he give rather than take the advantage in a situation involving doubt; in short, would he measure up to the standard of an English gentleman engaged in amateur sport? This certainly constitutes a test of morals and manners, if not quite of religion. It was this type of athlete that Rhodes felt might be trusted to work with heart and soul for international friendship based upon fair play and personal good feeling.

This view of athletics fits in very well with the idea that the athletic field may be very justly looked upon as one of the most important laboratories of the department of ethics.

Here are tried out in hard practice all the fine ethical principles of justice and generosity, courage and courtesy, honor, honesty, and humanity—not to carry the tempting alliterations too far. In the stress of excitement and under all incentives to win, the boy who yet proves a good sportsman and plays fair is building up moral fiber that will stand him in good stead in many more serious crises of his life.

The right spirit is already in our American college student. All that

is needed is that we set ourselves a little more consciously and definitely at the task of formulating athletics into the splendid moral discipline that it may easily become. Viewed from the standpoint of the large moral purpose, which will soon be the one very generally taken, all doubts which now beset athletic questions involving taint of professionalism, will speedily disappear, and we shall have amateur sport pure and simple, for the reason that it is amateur sport, and not professional, that best lends itself to the purposes of the moral laboratory. The great motive of building character will purify and ennoble sport, and place the department that deals with athletics beyond the question of a doubt as to its right to rank with the other great departments of the university.

To summarize then, we have passed in the West pretty well beyond professionalism in college athletics, unless possibly it be in the playing of summer baseball; we have eliminated the tramp athlete; thru more rigid rules regulating scholarship and attendance, we have removed "flunkers" from our college teams, so that the average standing of the university athletes compares favorably with that of any other equally large body of students; we have reduced our schedules in number of games, and brought down to a reasonable limit the time a student may lose thru being absent on trips; and we have recently been stimulating intracollegiate contests and interesting a much larger number of students than ever before in active participation in out-of-door sports.

All this indicates a very great gain, and gives promise of a still brighter future.

Our need, now, is more generally to give full university recognition to the Department of Physical Education, and to broaden the aims of the department as to culture values of character as well as training values of body.

DEPARTMENT OF NORMAL SCHOOLS

SECRETARY'S MINUTES

OFFICERS

President—D. B. Johnson, president, Winthrop Normal College.....Rock Hill, S.C.
Vice-President—W. J. Hawkins, president, State Normal School.....Warrensburg, Mo.
Secretary—Guy E. Maxwell, president, State Normal School.....Winona, Minn.

FIRST SESSION—Wednesday Forenoon, July 12, 1911

The opening session of the Department of Normal Schools was held in Golden Gate Hall, San Francisco, on Wednesday, July 12.

The meeting was called to order at 9.45 A.M. by the vice-president, William J. Hawkins, president of the State Normal School, Warrensburg, Mo. In the absence of the secretary, Miss May A. Ward was appointed secretary *pro tempore.*

The chairman then appointed the following committees:

COMMITTEE ON NOMINATIONS

E. Oram Lyte, president, First Pennsylvania State Normal School, Millersville, Pa.
John R. Kirk, president, State Normal School, Kirksville, Mo.
A. J. Matthews, president, Territorial Normal School, Tempe, Ariz.

COMMITTEE ON RESOLUTIONS

David Felmley, president, State Normal University, Normal, Ill.
N. D. Showalter, president, State Normal School, Cheney, Wash.
Jesse F. Millspaugh, president, State Normal School, Los Angeles, Cal.

The first address, "The Preparation of Teachers for Moral Training in the Public Schools," was delivered by John R. Kirk, president, State Normal School, Kirksville, Mo.

This was followed by a paper on "The Relation of the Academic and Professional Work in a Normal School," by Homer H. Seerley, president, Iowa State Teachers College, Cedar Falls, Iowa.

"The Normal School and the Training School" was the subject treated by David Felmley, president, State Normal University, Normal, Ill.

The papers were discussed by the following: Agnes E. Howe, instructor in history, State Normal School, San José, Cal.; John R. Kirk, president, State Normal School, Kirksville, Mo.; Alva W. Stamper, head of Department of Mathematics, State Normal School, Chico, Cal.; Helen F. Burke, superintendent of Holy Name Normal School, Spokane, Wash.; Martha Buck, Southern Illinois State Normal School, Carbondale, Ill.; George H. Brumhall, president of Brigham Young University, Provo, Utah; Cree T. Work, Fort Morgan, Colo.; and others.

The reports of the Committee on Simplified Spelling and the Committee on Agricultural Education were read by Homer H. Seerley, president, Iowa State Teachers College, Cedar Falls, Iowa.

It was moved and carried that the reports be accepted as read and printed in the records of the session.

It was moved by John R. Kirk, president, State Normal School, Kirksville, Mo., that two meetings of the Department of Normal Schools be held each year: one session in February with the Department of Superintendence, and the other during the regular convention of the National Education Association. The motion was adopted.

A motion was made and carried that the president of the Department of Normal Schools appoint a committee of eleven, representing the whole country, to report at the next meeting of the department just what statistics normal schools should keep.

The following named were subsequently appointed by the president, W. J. Hawkins:

Homer H. Seerley, president, Iowa State Teachers College, Cedar Falls, Iowa, *Chairman.*
James E. Klock, principal of State Normal School, Plymouth, N.H.
James M. Green, principal of State Normal School, Trenton, N.J.
David B. Johnson, president, Winthrop Normal and Indust. College, Rock Hill, S.C.
E. Oram Lyte, principal, First Pennsylvania State Normal School, Millersville, Pa.
David Felmley, president, Illinois State Normal University, Normal, Ill.
W. S. Dearmont, president, State Normal School, Cape Girardeau, Mo.
W. A. Shoemaker, president, State Normal School, St. Cloud, Minn.
H. F. Estill, principal, Sam Houston Normal Institute, Huntsville, Tex.
Z. X. Snyder, president, State Teachers College, Greeley, Colo.
J. F. Millspaugh, president, State Normal School, Los Angeles, Cal.

The report of the Committee on Resolutions was then given, as follows:

The Department of Normal Schools of the National Education Association hereby expresses its gratification in the assurance that is received from every quarter of the nation of an increased interest in the adequate preparation of teachers thru special instruction and training for the great work of teaching the children and youth committed to their care.

With a fitting sense of the obligation which rests upon them, and mindful of the serious duties which it involves, the normal schools of the United States believe that under proper conditions and equipment they have no right to refuse to undertake the responsibility of preparing teachers for every department of the public school service.

We rejoice in the rapidly increasing interest on the part of the educational workers everywhere and of the general public in the great movement which aims to secure for our children the benefits and blessings, moral, social, and physical, of play, of life and growth in the great out-of-doors, and of an uprearing in an atmosphere of kindliness and sympathy.

We wish to register our unqualified approval of measures which have for their purpose the inculcation in the minds of candidates for the profession, not merely of ethical principles, academically determined, but of ethical practices, determined by habits of right conduct in all human relations.

We believe that the time is fully ripe for the enlargement of the curricula of normal-school subjects by the addition to them of carefully organized courses of study in biology having reference to the essential facts of sex physiology and hygiene, to the end that our teachers may enter upon their work properly equipped to fight the great battle for purity and decency in our social life.

We urge on the part of the administration of normal schools a more perfect correlation of the two departments of instruction, the theoretical and the practical, in order that there may result greater unification of effort, a better adaptation of means to ends, and a lessening of cross-purpose effort in all the work of our schools.

Committee { Jesse F. Millspaugh, of California
N. D. Showalter, of Washington
David Felmley, of Illinois }

The report of the Committee on Nominations was as follows:

For *President*—W. J. Hawkins, president, State Normal School, Warrensburg, Mo.
For *Vice-President*—A. J. Matthews, president, Tempe Normal School, Tempe, Ariz.
For *Secretary*—Miss Martha Buck, Southern Illinois State Normal School, Carbondale, Ill.

It was moved and carried that the reports be accepted as read and printed in the records of the department.

The department then adjourned.

May A. Ward, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE RELATION OF ACADEMIC AND PROFESSIONAL WORK IN A NORMAL SCHOOL

HOMER H. SEERLEY, PRESIDENT, IOWA STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA.

Scholarship of the highest and best type is fundamental to the real efficiency and the certain success of all teachers of every grade in all kinds of public schools. This required scholarship must include all branches of study that give perfect insight into the work designated as appropriate for elementary and secondary schools. This indicates that the amount of work to be done is neither meager nor minor, since the person thus prepared must be superior to the standards exacted of students who complete high-school and college courses. The degree of perfection that is essential of attainment has exceeded any of the standards expected of cultural and liberal education and has developed the special-teacher school in which training, development, and scholarship have all received extraordinary attention and commendation. The results that have been reached have been of such a notable character that the state normal schools have been honored, supported, and improved with a zeal and an appreciation that no other kind of popular education has experienced, while their graduates occupy a place in public esteem for their efficiency and for their practical service that is sufficient to prove the reality and the perpetuity of their province. This development and recognition has come more from the absolute value and serviceableness of the scholarship these teachers' schools require than from any other reason, since experience has proven that the differences between the decidedly well-prepared and the moderately well-prepared are very great indeed.

For these reasons the normal schools have a province that is not invaded by other classes of schools and colleges, however great or distinguished these may be, because they need not fear the results of time or of change as long as their preparation for a career maintains this high grade of superiority and excellence. The limits of the subjects that will be taught and that will properly belong to the normal-school program of studies depend entirely upon the breadth of the function accented, the largeness of the field of service that is undertaken to be supplied, and the greatness of conception that educational work as a profession assumes to those who hold the destiny of the institution in their control.

There can be no such thing as "full educated" and "part educated" as truly applied to the right training of teachers for an effective career. Defining "full" and "part" as implying any certain length of course or any certain varieties of knowledge is a false assumption and should be

repudiated. All grades of schools need thoroly trained and thoroly educated teachers, specially adapted and decidedly skilled in the particular field of activity where they have their greatest power and their largest personal fitness.

The academic preparation of the kindergartner, the primary teacher, the elementary teacher, the music teacher, the commercial teacher, the drawing teacher, the domestic-science teacher, and the department high-school teacher are notably different in many particulars if they are each to be skillfully trained and fully equipped for a distinguished success, but each needs as full development of mind, as large a capacity for usable knowledge, as much greatness of character and as profound an efficiency as an instructor as any of the others. The true province of academic training in a normal school is breadth of knowledge, comprehensiveness of intelligence, magnificence of power of presentation of truth to others and marvelous depths of capability in the understanding of human nature so as to guide it to the supreme good.

There is special need for a scholarly environment, for sterling yet moderate surroundings, for heroic personal bearing and for a spirit of loving sacrifice in the atmosphere of a teachers' school. If it is to reach the student body and cause the members to want to possess scholarship in this supreme fullness, then the atmosphere of intellectuality, of morality, and of the higher life must be marked in great abundance and in definite permanence, while the glorious spirit of the school must possess such convincing and living characteristics that they inspire everyone whom it touches to attain to the supreme and the complete for the sake of the greatness of the work to be done. In this regard the genuine teachers' school cannot be surpassed, as it wields an influence, compels an attitude, and reaches a standard that cannot be fully realized by those who have never known its marvelousness of province or its capability as a trainer of men and women. It is such things as these that make unusual scholarship a possibility, remarkable application an actuality, and positive efficiency a constant reality. It is here that scholarship of every kind reaches its highest natural resourcefulness; that the teaching conception of service to others attains its greatest rank of productiveness; and that the magnificence of the importance of usableness has its broadest application.

Teaching that is worth the while is a great profession, not a technical trade. Its province is determined more by sincerity and by personality than by philosophy and by method. It reaches its highest rank when it shows the evangelical note, seeks the salvation of the human family, and supremely loves righteousness and truth as ends, not means to ends. Mental science, school management, historical progress in educational ideas and practice, philosophy of administration, and application of knowledge and experience in actual instruction of others are but terms to define

the development, enlargement, and uplift of personality and character. They are the touches of the profession which give birth to ideas that rule the worlds of thought and action. They are the phases of civilization which the experience of the past has taught mankind are essential to the novitiate. Such training in professional thinking and acting sets him at the outset on the shoulders of the race, and from this high station of preparation his vision reaches the promised land of human progress and supreme happiness. This growth in professional ideas and ideals needs time for proper expansion. It takes the four years of mind expansion and scholastic-equilibrium development to create the attitude that the trained teacher must possess. There must be a gradual growth of the professional spirit in order to reach full maturity and complete effectiveness. It is the old story of tarrying in the Jerusalem of educational conceptions and practices until power is conferred from on high. Hence the work of the normal school is a greater undertaking than is often realized, as it is not only formal, but also spiritual, not only scholastic and knowledge-giving, but also professional and spirit-giving.

That there is a definite, absolute relation between the scholastic and the professional work of the teachers' school that must be discovered is positively certain. The vast majority of students come to such a school for the knowledge offered by the program of studies and for the experience that living in a rare and ennobling atmosphere can give. They thus combine duty and pleasure and enter upon experiences that reorganize their lives and reconstruct their ideals. The normal school without the academic side of power can never become the true alma mater of its graduates since it would not be deserving of their first love. It must have the real part in training them "to dream dreams and see visions" before professional instruction has definite value or lasting impression. The student must learn to love knowledge, must acquire the ability to talk interestingly about knowledge, must feel the desire to help others thru his knowledge, and must recognize the great importance of knowledge to a better civilization before he has the burning desire to comprehend the philosophy of teaching or to apply himself with fervid zeal to the acquirement of skill and capability as an educator. For this cause, it does matter whether the individual members of a teachers' school faculty are remarkably successful instructors and inspirers in their class work. For these ends, the selection of those with power to teach admirably and most effectively the academic lines of preparation is highly important, because the first impulse that a student ever receives to decide to follow a teaching career comes to him when he is under the influence and enjoys the masterfulness of those who "teach with authority and not as scribes."

THE NORMAL SCHOOL AND THE TRAINING SCHOOL

DAVID FELMLEY, PRESIDENT, STATE NORMAL UNIVERSITY, NORMAL, ILL.

In order that any institution may do its work there must be unity in its organization; all parts must co-operate for a common end. The functions or relations of the various parts cannot be seen without considering the law of the organization as a whole. The law, or organizing principle, of an organization is to be found in its purpose. The purpose of the normal school is to fit its students for teaching children. It is a technical school in which knowledge is of value as it ministers to an art. The teacher stands committed to the biological conception that knowledge is of value as it determines conduct. Hence what anatomy is to the surgeon, or mathematics to the engineer, the various branches of study are to the teacher. In a sense they are the instruments of his art. No teacher is really firmly grounded in his profession until he feels that the value of every subject, topic, or question is to be found in its influence upon the development of the child. Lessons are to be judged, not in their individual nature, but in their final outcome. In the normal school the various branches of study are to be organized not so much with regard to their inner, logical relations as with regard to the interests and aptitudes of children. The question is not merely, What is this body of thought that we call arithmetic, nor yet what portions of it are of greatest practical worth, but rather, How shall the child proceed to acquire this knowledge? In the normal school the child occupies the center of the stage. The institution exists not for the normal students, but for the children whom these students are to teach. The early normal schools had no training department. The instructors were men of tremendous enthusiasm who had already won distinction as brilliant teachers. The glowing imagination would picture actual school conditions with extraordinary vividness. The memories of their own early experience as teachers of children guided them in their work. The students, if they had taught, could not have before them the same children, or children under the same conditions, as their instructor; while the younger students had never looked upon children from the standpoint of the instructor. It was not long in the history of all public normal schools before the need of a training school was keenly felt. The children discussed in the classroom must be no mere abstractions, but living, concrete, realities. Upon these the thought of student and teacher may focus. It is about them that the activities of the normal school must revolve. Hence the training school has come to be an essential part of the American normal school. It serves in part as a model school where skilled instructors exemplify superior teaching before classes who have been taught what points to observe; it serves in part as a school of experiment where some plans and methods may be tested and compared; but its chief function is to afford

young teachers an opportunity to acquire good habits of teaching thru practice under the supervision of a wise and sympathetic training teacher.

Normal-school instructors should feel that their departments exist only that their students may be fitted to teach children. They must see not merely the young men and women on the benches before them, but the children waiting beyond. Hence no one can hope to attain high excellence as a teacher in a normal school unless he has taught children. This experience must energize and color all his work.

Here I may state in passing, that some of us who are normal-school principals betray that we are ashamed of our high calling. In filling our faculties we care more for academic degrees than for professional training, skill, or experience. Young doctors of philosophy with no teaching record, or a record of failure, seem to be in high demand. In a normal-school catalog before me, along with the name of each teacher, is printed the name of the institution responsible for his education. Two of the subordinates near the foot of the list have evidently had normal-school training. The others have apparently attended only colleges and universities, sometimes two or three of them. Yet I happen to know that the president, the vice-president, and some others in this faculty are graduates of normal schools. They apparently believe that their professional training is to be concealed rather than displayed when appealing for the confidence and patronage of students. So I repeat, normal-school instructors should have been successful teachers of children for a period long enough to keep the conditions of the common school always in sight and to insure a living interest in its problems.

This position does not mean that the instructor's vision is to be bounded by these conditions, or that normal-school instruction is to consist of hand-to-mouth devices for immediate use in the training school. It is just as important that the primary teacher read Browning and Wordsworth, that she study sociology and the theory of evolution, as that she take primary handwork or primary reading. The broader outlook and deeper sympathies must count for something in her work. Still it is maintained that the so-called "general-culture" courses have no place in the normal-school curriculum unless they result in better teachers and better teaching. Such a result surely is more likely if the instructor himself is keenly alive to the needs of children and the conditions of school life.

It seems superfluous to state that the general doctrines of instruction and management taught in the department of pedagogy should prevail in the training school. This can be secured best by having the director of the training school serve as instructor in general method. In his class should be discussed the various questions of classroom technique—lesson-planning, assignments, questioning, drills, reviews. This work should precede or run parallel to the student's first practice-teaching and be

reinforced in interviews with training teachers, the weekly teachers' meetings, and the discussion of the model lessons.

There have been normal schools in which no special effort was made to make the practice of the training school square with the theory of the normal classrooms. The divorce has been justified as developing an eclectic spirit in the normal student; when the doctors disagree, he must think for himself.

It has been claimed, too, that where a consistent system is followed thruout all departments of the normal school it begets a system of narrowness, of cocksureness, incompatible with that humility of spirit that is the prime condition of all progress.

It is true enough that there is a vast area of unexplored territory all about us. Still if we have made no progress in the science of education, there is no place for the normal school. As we are sincere men and women, we must believe there is a body of educational doctrine, rational in theory and sound in practice. If we do not believe this we have no place in the normal school. It is the function of the normal school to expound and exemplify this doctrine. It must be done clearly and consistently. It is the right of the young teacher, as truly as of the young physician or the young engineer, to come into his professional inheritance unembarrassed by clouds upon the title. It is primarily the duty of the department of pedagogy to declare what this general doctrine is. The training department must consistently carry out this doctrine.

The unity of the normal school demands that the instructors shall know what is going on in the training school—in their own departments minutely, in all departments somewhat. In planning the daily program of the various instructors, time should be allowed for frequent visits to the training school at the hour when many classes may be found at work in his branch.

Unless a course of study has been imposed upon the normal schools by state authority, the head of each department should plan the training-school course in his branch. If the faculty is well balanced and competent, we may presume that no one else about the school is so well qualified to do so. It will make him feel responsible for this work in the training school, will give point and interest to his visits, and will add new zest to his instruction of the young teachers who are to teach his course.

The course as outlined will provide a list of topics in due order of sequence, a catalog of available material for reference and illustration, and directions as to the special method of particular topics. This course will not be final. The principal of the school and the director of the training school will suggest changes in the interests of co-ordination. It will probably be necessary to reduce the time demanded. Frequent revision of the course will be necessary in the light of the experience of the training school.

In order that the training teacher may follow the course wisely, she

must know what it is. She must know the general scope of the work in all grades, and thoroly the work of her own grade. She must feel under obligation to understand the plan of each department, and to contribute from her experience toward the promotion and perfection of this plan. This co-operation cannot be secured without frequent conferences between instructor and training teacher. The normal-school instructor has reciprocal duties. He must explain his course and methods to the training teachers, and counsel and advise with them in regard to difficulties.

It may be objected to this that it reduces the training teachers to mere "subs" to the heads of departments. They must take their methods from the department of pedagogy and their subject-matter from the other departments. Training teachers are not without scholarship, and they are abundantly able to plan the curriculum that they must teach and supervise. To this objection there are three replies:

1. Training teachers are not alone in being subordinates. All parts of a working organization must be subordinate to the law of the organization as determined by its purpose. The objection at the bottom is only a personal one, an objection that would not occur to one devoted to the institution.

2. If the training teachers are to determine subject-matter and method, the normal school falls apart. We straightway have two schools which may or may not agree in theory.

3. The normal school suffers from the lack of vital contact with the children in the training school.

The frequent visits of the normal instructor to the training school cannot fail to react upon his teaching. Not the least of the advantages of the ordinary written examination is that in it we examine ourselves as well as our pupils. We test the quality of the instruction as well as the diligence of the students. In these visits the normal instructor receives a kindred benefit; he measures his instruction by its results. Then, too, he can afford great help and inspiration to the student teachers. He knows best what illustrative material is available, the resources of his department in library and apparatus. He can suggest needed study where he finds that defective knowledge of the subject is the chief obstacle to success. His criticism of the teaching should usually be made thru the training teacher, partly to recognize her responsibility, partly to preserve harmony in the criticisms and suggestions that may reach the student teacher.

The normal instructor should occasionally teach classes of children. He must keep alive in his experience just what the problems of teaching and management are. He must know the practicable and the possible in the schools of this generation. Teachers of the normal school must be men of ideals who with prophetic vision behold what ought to be and is to be in education, but only as they comprehend present conditions and tendencies can they intelligently direct the line of advance.

When the program permits, the normal instructor should occasionally teach a class of children for an entire term. It gives opportunity to conduct some needed experiment or try out some promising innovation. He

should also from time to time teach a model lesson of observation and criticism. This will require him to teach the class for a week in advance that he may get on easy terms with the children, discover something of the range of their knowledge and lay a proper foundation for the lesson proposed.

When normal-school teachers are asked to teach classes of children a good deal of inertia is sometimes revealed. This is not because they are content to be mere guideposts, pointing the way they never travel themselves. It is due to the haunting suspicion that they cannot carry out the lesson as planned. They fear the personal humiliation attendant upon partial failure.

It must appear from the foregoing discussion that much good may result from bringing the normal instructors into intimate relations with the training school. But such co-operation must be hearty and continuous, it must not be constrained; in fact, little will come of it unless the normal instructors are in the mood to ask the privilege of such co-operation as a necessary condition for developing their own work.

The question thus becomes one of the attitude of the teacher. This attitude depends upon his education, his acquired habits, his point of view. So long as our normal instructors are mere university products we may expect little of this eagerness to function in the training school; for there is little in the atmosphere of most university classrooms to exalt the importance or the dignity of the elementary school. But when our faculties are made up, as they should be, of men and women of practical school experience, who are really proud of their professional training and of their professional ministry, we shall find the training school the central fact of the normal-school organization, and all the teachers participants in its organization and work.

REPORTS OF COMMITTEES

REPORT OF THE COMMITTEE ON SIMPLIFIED SPELLING

To the Department of Normal Schools of the National Education Association:

Your committee appointed in 1909 presents herewith its second annual report on the progress of the movement for a simpler and more rational spelling of the English language.

1. The special work of the past year has been done by the Simplified Spelling Board's Executive Committee in selecting simplified forms for the badly spelled words in the entire dictionary vocabulary. The task has been partly completed. The more difficult cases, including chiefly words of the Teutonic type, have been left for further consideration and adjustment after selected representatives of the Simplified Spelling Board of America and the Simplified Spelling Society of Great Britain have held a joint conference in London and decided the solution of the chief difficulties involved. This conference will be held in September of this year.

2. The Simplified Spelling Board has authorized the organization of the North Central States Branch, to serve as a body of scholars to promote the use of the simpler forms in the normal schools, colleges, and public schools of that part of the United States. To enable this propaganda to be more widely conducted, six additional members of the Simplified Spelling Board have recently been nominated from these states.

3. The state normal schools at Cedar Falls, Iowa, Normal, Ill., Greeley, Colo., and the provincial normal school at Truro, Nova Scotia, now use all the simpler forms adopted by the Simplified Spelling Board: (1) in their official correspondence, (2) in their mimeographed circulars distributed among their students, and (3) in their printed bulletins and catalogs given to the public. Such action has done much to call public attention to these schools, has given them special prominence as educational centers of public opinion on school reform, and has enabled them to assume a creditable leadership in other lines.

4. The hope of reform and of improvement in every line of elementary and secondary public education depends upon the state normal schools, if they are willing to be progressive and enterprising. This opportunity to take the initiative in developing interest and in aggressively promoting real reforms and improvements in sane and sensible ways is a privilege that cannot well be neglected, since the decision that is made by them will settle more or less permanently the actual province that normal-school education and training are to be granted in the coming years. Few reforms that have been undertaken by the present age promise better results for elementary and secondary education than does this of a simpler and a saner spelling of the mother-tongue.

5. Joined with these things must be mentioned the importance of the "phonetic key alphabet" adopted by the Department of Superintendence of the National Education Association and recommended to that great body. This is recommended as a key and not as a new alphabet for general use. It is a practical solution of an acknowledged difficulty in the notation for pronunciation of the sounds actually used by English-speaking peoples; and a careful and scholarly investigation of its merits will secure for it a recognition of its serviceableness.

6. The considerable success of the Simplified Spelling Board within a few years of its organization guarantees the completion of the undertaken work in both America and England and promises educational results that will be notable in history, as the work in progress is the greatest endeavor of the kind that civilization has seen.

Respectfully submitted,

Committee { CHARLES MCKENNY, Milwaukee, Wis.
HOMER H. SEERLEY, Cedar Falls, Iowa
DAVID FELMLEY, Normal, Ill.

REPORT OF THE NATIONAL COMMITTEE ON AGRICULTURAL EDUCATION

To the Department of Normal Schools of the National Education Association:

Your committee files herewith its second annual report of the progress that is shown in securing national legislation on the subject of "Vocational Education":

1. During the past year the committee has co-operated continually with special friends of the Vocational Bill in the Senate and in the House of Representatives. Many letters have been written at the suggestion of the committee by the state normal schools and by the state superintendents of public instruction to members of Congress, urging early action on this measure. The committee has kept in touch with the situation and its members have personally done everything they could to bring about a wider public interest.

2. The conflicts that have existed in congressional business, as well as the executive pressure that has appeared to compel legislation that has to do with other classes of political problems, have prevented any real consideration being given to the greater problems of the education of the masses. The difference of opinion that has existed regarding the place of the nation in public education has gradually disappeared and today the sentiment of the masses assumes that popular education deserves as much attention from Congress as any other public interest. It seems, therefore, that the movement for national aid is continually growing in favor where properly understood and where its advantages are fully realized.

3. There was a time following the death of Senator Jonathan P. Dolliver, of Iowa, the sponsor for the Vocational Bill in the Senate, that no other senator seemed ready to take his place and devote time and energy to securing action necessary to bring the bill to a vote, but now Senator Carroll S. Page, of Vermont, assumes that privilege and will give his experience, support, and activity to securing an early decision.

4. At the meeting of the Department of Superintendence at Mobile, the committee held two sessions and made an exhibit of products. At these sessions, plans, policies, and methods of work were discussed and much interest was aroused among the members. It was decided to enlarge the membership of the full committee so as to have a live and active representative in every state. It was also decided to have a full meeting of the committee at St. Louis next February and thus be prepared to get more efficient service in pushing the agitation among the people the coming congressional year. Nominations are now in order for the several states not represented on the committee and the Executive Committee stands ready to accept those who are enough interested to take charge of the campaign in their respective states. The following states are now organized:

Iowa, Rhode Island, Nebraska, Ohio, South Carolina, West Virginia, Wisconsin, Maryland, Louisiana, North Carolina, Missouri, Pennsylvania, Illinois, Utah, Massachusetts, Maine, Vermont, Texas, Tennessee, Michigan. The new members needed should be persons who are prominent and enterprising educators who are in sympathy with the purpose of the Vocational Bill now in Congress, and should be preferably superintendents of public instruction or representatives of state normal schools, as these persons are naturally more interested in the measure.

Respectfully submitted,

Executive Committee

HOMER H. SEERLEY, Cedar Falls, Iowa
E. E. BALCOMB, Providence, R.I.
H. G. WILLIAMS, Athens, Ohio
D. B. JOHNSON, Rock Hill. S.C.
THOS. C. MILLER, Shepherdstown, W.Va.

DEPARTMENT OF MANUAL TRAINING AND ART EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Clifford B. Connelley, dean, Carnegie Technical Schools.....Pittsburgh, Pa.
Vice-President—Mrs. Ellen H. Richards*.....Boston, Mass.
Secretary—Miss May Gearhart, supervisor of drawing.....Los Angeles, Cal.

FIRST SESSION—Tuesday Forenoon, July 11, 1911

The meeting was called to order in the San Francisco Institute of Art at 9:40 A.M. by President Clifford B. Connelley, dean of Carnegie Technical Schools, Pittsburgh, Pa. In the absence of the secretary Miss Helen Louise Johnson was appointed secretary *pro tempore.*

Mr. Connelley read his own paper on "To What Extent Does Manual Training Aid in Adjustment to Environment?"

The third paper on the program, "The Requisites of the Efficient Teacher in Industrial Schools," prepared by George W. Gerwig, secretary, Board of School Controllers, Allegheny High Schools, Pittsburgh, Pa., was presented by Mr. J. M. Berkey, principal of Liberty sub-District Schools, Pittsburgh, Pa., in the absence of Mr. Gerwig.

The paper on "The Dynamic Value of Manual Arts in the Public-School System of Education," prepared by T. D. Sensor, Department of Public Instruction, Trenton, N. J., was presented by Mr. Cree T. Work, of Colorado.

Mr. Connelley then presented the papers for discussion, introducing Mr. E. Athelstan Ross, supervisor of manual training, El Paso, Tex., in place of James Edwin Addicott, who was unable to be present. Open discussion followed, Mr. Paul Kreuzpointner being first given the floor.

The Report of the Committee on College Entrance Requirements was then called for. Mr. Connelley explained that the Carnegie Foundation had made it possible to use funds for the investigation of certain educational questions and had it not been for this, this report could not have been prepared.

It was explained that the resolutions adopted by the Department of Manual Training and Art at the National Education Association Convention held in Boston, in 1910, regarding College Entrance Requirements brought into being a committee which had prepared the following report. In the report is embodied a resolution requesting the amount of $60 to be appropriated for the continuation of the work of the committee. It was moved and carried that the report in full be accepted. This indicates that a request is or should be made of the Board of Directors of the National Education Association for the amount indicated in the report, in order to further the work of the committee.

The chair then appointed the following committees:

COMMITTEE ON RESOLUTIONS

W. A. Dunn, principal, Polytechnic High School, Los Angeles, Cal.
S. Maria Elliott, instructor in Simmons College, Boston, Mass.
F. N. Cauch, Oakland, Cal.

*Deceased.

COMMITTEE ON NOMINATIONS

E. Athelstan Ross, supervisor of manual training, El Paso, Tex.
Miss May Gearhart, supervisor of drawing, Los Angeles, Cal.
Miss Helen Louise Johnson, associate editor, *Good Housekeeping*, New York, N.Y.

The meeting then adjourned.

SECOND SESSION, Wednesday Forenoon, July 12, 1911

The meeting was called to order by the president at 9:40 A.M.

Mr. Paul Kreuzpointner, chairman, Industrial Committee of the American Foundrymen's Association, Altoona, Pa., was introduced. He read a paper on "The New Standard of Present-Day Industrial Education in Europe."

The second paper, on "The Requisites of Effective Teaching in the Manual and Household Arts," was then presented by Helen Louise Johnson, associate editor, *Good Housekeeping*, New York, N.Y.

The third paper, on "Present Problems in the Literature of the Manual Arts and Vocational Education," by Alfred Guillou of Berkeley, Cal., was then given.

Discussions followed, after which the meeting was adjourned.

THIRD SESSION—Thursday Forenoon, July 13, 1911

The meeting was called to order at 9:40 A.M. by the president, and Miss Ednah A. Rich, president of State Normal School of Manual Arts and Home Economics, Santa Barbara, Cal., presided as chairman, this being the session devoted to the subject of home economics. Two papers were read, as follows:

"The Public-School Domestic Science Department as an Influence in the Community for Enforcing the Observance of Pure Food Laws, Civic Cleanliness," etc., by Matie P. Clark, head of Departments of Domestic Science and Manual Training, Commercial High School, Oakland, Cal., and "Some Actual Needs for Intelligent Purchasing of Household Commodities and Practical Methods for Keeping Household Accounts," by Miss Etta P. Flagg, supervisor of Home Economics, public schools, Los Angeles, Cal.

Miss Isabel Bevier, head of the Department of Household Science, University of Illinois, Urbana, Ill., then presented the report of the Committee on Nomenclature.

President Connelley moved that the report be adopted, and after some discussion the motion was carried.

The meeting then proceeded to the discussion of the papers. This was opened by William H. Snyder, principal of the Hollywood High School, Hollywood, Cal. He was followed by Harriet A. Boyer, Sophie Newcomb College, New Orleans, La., and Dr. Corwin, of the Colorado Fuel and Iron Company's Hospital, Pueblo, Colo.

Miss Rich then retired to give the chair to President Connelley and the reports of the committees were called for.

Mr. Dunn, the chairman of the Committee on Resolutions, presented the following:

Whereas, This session of the Department of Manual Training and Art Education has been most profitable; therefore be it

Resolved, That a cordial vote of thanks be extended to the local committee and to those in charge of the San Francisco Institute of Art for all efforts contributing to this success; to Dean Connelley for his efficient preparation for, and able direction of, this Department of the National Education Association, convened in its present session; to Miss Helen Louise Johnson for her efficient service as secretary.

Whereas, The present-day tendencies have brought about their recognition of the growing importance of the work for which the Department of Manual Training, Art Education, and Home Economics, stands; be it

Resolved, That a closer affiliation is necessary between this body and the related organizations in the several states in order that the central organization may be available for the solution of local problems.

The Committee on Nominations presented the following report:

The first part of the resolution presented by the foregoing committee is most important. If we consider present conditions of education, we need to take some definite action to forward this closer affiliation. We therefore desire to make a precedent and have to report for nomination for president of this section a man in whose hands we believe these closer relations will be made possible. The Nominating Committee desires to present the following:

For *President*—Clifford B. Connelley, dean of the School of Applied Industries, Carnegie Technical Schools, Pittsburgh, Pa.

For *Vice-President*—Miss Isabel Bevier, president of the American Home Economics Association, Urbana, Ill.

For *Secretary*—W. A. Dunn, principal Polytechnic High School, Los Angeles, Cal.

The report of the Nominating Committee was unanimously accepted.

The meeting then adjourned.

FOURTH SESSION—FRIDAY FORENOON, JULY 14, 1911

The meeting was called to order by the president at 9:40 A.M.. Mr. Connelley presented as chairman of the meeting, Mr. A. B. Clark, associate professor of art, Leland Stanford Junior University, and introduced him as the first speaker on the program.

Mr. Clark then presented his paper on "Art Education in the Public Schools, an Essential Civic of Perfection."

Chairman Clark then introduced Mr. Cheshire L. Boone, director, Department of Art and Handwork, Public Schools, Montclair, N. J., who read a paper on "Art Service as a Basis for Classified Knowledge."

Miss May Gearhart, supervisor of drawing, Los Angeles, Cal., presented her paper on "What Has Art in the Schools Done to Preserve and Cultivate the Imagination?"

Discussion was opened by Katherine M. Ball, supervisor of drawing, San Francisco, Cal., who was followed by: Harriet N. Morris, San Diego, Cal.; Clara Robbins, Billings, Mont.; and Paul Kreuzpointner, chairman, Industrial Committee of American Foundrymen's Association, Altoona, Pa.

After the discussion the meeting was adjourned.

HELEN LOUISE JOHNSON, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

TO WHAT EXTENT DOES MANUAL TRAINING AID IN ADJUSTMENT TO ENVIRONMENT

CLIFFORD B. CONNELLEY, DEAN OF THE SCHOOL OF APPLIED INDUSTRIES, CARNEGIE TECHNICAL SCHOOLS, PITTSBURGH, PA.

We have been given a royal welcome to the Golden State, a state which has stood for great things and royal welcomes from the present time back to the days when the weary seekers after gold crossed desert and mountain that they might arrive here.

Today, this magnificent city is to be a forum and the many thousands here assembled have been empowered to hear and decide cases in this educational court. We have passed thru the evolution of the stone, bronze, and iron ages, each one contributing generously to the civilization to which we belong. Today we assemble in the Golden State so rich in possibilities that conservation must guide us in all action.

There are few educated people today who do not possess some stock notion regarding our work. There are also few educators engaged in special work who do not at times make the special side a rival fetish to some other line of work. Between these two classes, in every possible gradation of opinion, are those who aid in training the future citizens.

The kindergarten movement was the first force to awaken educators to realize that our schools owe the children more than mere intellectual training and memory drills. This was the entering wedge to make the public school a strong factor in developing the school and industrial progress of our nation.

According to the *Annual Report* of the Commissioner of Education, for the year ending June 30, 1910, manual training was taught in the common schools of more than one-half of the cities of the United States. There were 257 schools devoted entirely to manual training, or the manual arts. In these schools 16,834 boys and 9,803 girls received manual or technical training; and altogether in the entire country 58,354 males and 30,077 females of high-school grade received instruction in the manual arts. Also, there were 74 Indian industrial schools.

The educational exhibits of our world's fairs, namely, at Philadelphia, Chicago, Buffalo, and St. Louis, have proved to the people of the United States and foreign countries what industrial education has done for our boys and girls.

Since manual training is spreading so rapidly thru our entire country and is obtaining fuller recognition in the school systems of all our states, it is not only fitting but most necessary that the place of the manual arts in our educational system be never lost sight of and that we consider carefully today "to what extent does manual training aid in adjustment to environment?"

No man can escape the influence of environment. He may battle with conditions that surround him, he may fight against things as they exist in his community, he may go even farther than this and endeavor to remodel the social and economic status, but in the ultimate analysis he will find that the most that he can do is to combat the evil and adjust himself to the good in the environment which is his. It is this adjustment to the substantial and the worthy elements in the community which is the solution for the social problem of today. So long as nations are founded upon the collective system, so long will men and women find it necessary to sacrifice to some measure the characteristics of the individual unit for the welfare of the mass. Society exists today because men of earlier periods realized that security comes from union and that each must give to the collective body something from the storerooms of the individual. And because society has thus been established and continued, it behooves those of us who believe in the stability of social and economic forms so to adjust ourselves and our callings to our environments that the compact

body of citizens shall rise higher and higher in the social and intellectual scale as the years go by, with a final perfect relation as our ultimate aim.

How can this adjustment to environments best be accomplished? This is the question with which educators must deal. It is the problem which confronts the men and women who today are endeavoring to point out the paths which must lead to the solution of much that is vexing the far-seeing and the thoughtful. An indiscriminate grasping for solutions will hardly be of much help to us. An indefinite tendency to adjust matters will not avail us much. Speaking of things as they today exist, we may safely say that we now find two roads which lead to the adjustment to environment. The first of these—and I speak of it first because it is most frequently traveled—is the road of non-resistance. It is the course of the aimless and the slothful, it is the path of the shiftless and the thoughtless. It is the shortest line between bare sustenance and labor, and therefore the most readily adopted. To the class of persons who travel along this road, conditions exist simply because they do exist, and for no other reason. A man finds himself in a manufacturing community and adjustment to such environment means to him a toleration of conditions merely to the extent that daily food is a necessity. Self-preservation is his only guide—he knows that he must fall into line with the community if he is to live in its midst, whether it be a community of agriculture, commerce, or manufacture. From this man we can expect little, if anything, in the ultimate solution of our social and economic problem.

Then there is the second and the more desirable road. It is the path into which educators are today endeavoring to lead the student and the laborer. It is the current into which leading thinkers are attempting to direct the man of might and muscle by developing his mental capacities in the proper relation to his physical prowess. This is the path of scientific adjustment, the course which eliminates the evil in the environment and brings about a proper adjustment between good conditions and good men. Everything that is educational has more or less of this tendency to adjustment.

Everything that makes for the welfare of the race is founded in some degree on this fundamental principle of adjustment, the adjustment of men to conditions, and of men to each other's needs and desires. It is one of the rocks upon which the social body is founded, one of the staffs by which the economic whole is supported.

In the early days, the force of education was directed almost wholly in this country to the development of mere mental attainment and the progress of cultural arts. Hand skill and physical competence were left to drift for themselves as best they might and to work out their own solutions in the ways which most readily appealed to their followers. As a result, the line of least resistance was followed. There were no thinkers to formulate systems, no leaders to establish methods, for the scientific application of the proper principles. But this could not go on forever

in a country where commerce and manufacture are the chief sources of wealth, where millions of citizens are daily engaged in mechanical and industrial pursuits. Men began to think of these things and to analyze conditions. They saw that unless methodical principles were applied to the crafts and industries there would eventually be naught but chaos in the commercial and manufacturing world. They looked about them and studied the attempts of other nations to meet just such problems. They found the guild system and the apprenticeship idea of other lands and they began to apply them to their own conditions. Large manufacturers endeavored to offer their unskilled youths some of the advantages which such systems had to give. But the feeling of unrest was too great to be satisfied by this one attempted solution. The far-sighted leaders saw that the true answer to the problem was a method by which the training of the hand could be carried on simultaneously with the training of the mind. They began to realize that the public school, the very foundation of American democracy and republican strength, must be utilized in the ultimate solution of this problem of adjustment. Hence, slowly but gradually and surely, the manual-training department became established in the public schools of the land; and then came the more advanced schools and the vocational and technical institutions covering our entire country. Now that the experimental stage is largely a thing of yesterday, and that manual-training schools are here to remain with us for generations at least, we may ask to what extent do these schools aid in adjustment to environment, to what degree have they solved the problem which helped to give them birth?

If all the world could be made up of followers of the old professional careers, manual-training schools would have no legitimate reason for existence. But simply because the needs and the pursuits of men are more diversified than this, manual training and vocational schools have been called into being. Men must be housed and clothed, buildings must be reared into space, building products must be manufactured, and hundreds of other necessities call for the labor and the skill of trained workmen, men whose hands are as skillful as their minds are fertile. If society is to progress and nations grow, the hand of the man must be trained, his eye must be developed, and all his abilities brought into play. What, then, is more appropriate than that these developments should be started while the man is yet young—yea, while the child is still in the growing age? Youth responds to treatment more readily than maturity, and the nation of most skilled workmen will be that nation whose children have been taught the elements of this same skill. It is this endeavor to find out for just what career the child is best suited that has so much justified the continued existence of the manual-training school.

Mere cultural training or mental development will not inform the teacher as to whether his young pupil is possessed of the quick eye and

ready hand which are the evidences of a future skilled workman. Nor can the community afford them. Every community has need for a greater or a less number of skilled workmen and men whose mechanical abilities can contribute to the progress of the district. The problem is to discover these men at an early enough age to enable the adjustment of their abilities to the needs of the community in which they live and which is to be the home of their mature years. Manual training is an easy and desirable method of arriving at this discovery. The child who is eminently fitted to perform, in future years, a commendable part in the industrial life of the city or town in which he is to live, will soon have his dormant abilities made obvious to himself and his teachers, and, by the gradual development of these talents, first thru the manual-training school and then thru the vocational and technical institutions, the man who has grown out of this child will become an important factor in the progress of the community; he will have no difficulty in adjusting his abilities to the needs of his surroundings.

Manual training is the keystone by which the growing student is brought over into the field of useful industry. It is the link by which the children of today become parts of the chain which spells progress for the community. It enables a scientific adjustment to environment and tends to industry and growth. It is the broad avenue by which young men and women may travel to mechanical and vocational success. It is true that manual training by itself could not accomplish all that is desired. It is rather but the beginning, the weeding out process, where the latent talents of the youth are discovered and the boy is prepared to continue his work in the higher school or advanced institution. But it is, after all, the first stepping-stone to industrial adjustment.

Without manual training and its associated schools of advanced work, the nation's young people will not attain their fullest development. Added to classical and cultural studies, this training comes to broaden and to widen, to enlighten and to prepare the student for the work which best suits him. We do not get everything out of our children that *should* be brought to the surface unless we offer them a course in manual training along with the book learning that we give them. We cannot adjust education to the needs of our communities unless we make manual training a part of our curriculum.

Germany is a classical example of a nation that has not neglected the development of its most valuable resources—its young men and young women. For example, in one city there are forty different kinds of industrial continuation schools—schools for chimney-sweeps, coachmen, hotel and restaurant waiters, jewelers, shoemakers, carpenters, machinists, blacksmiths, tinsmiths, printers, bookbinders, and many others. The name "continuation school"—*Fortbildungschule*—is chosen advisedly, for every youth who graduates only from an elementary school is obliged by

law to continue his education in some such continuation school during the period of his apprenticeship to his trade, and he is sure to find a continuation school appropriate to his vocation. Employers are by law required to give their employees the time to attend these schools, from six to twelve hours a week, depending on the trade, and for from three to five years. These continuation schools are not evening schools, because it is well known that boys from fourteen to fifteen years of age are unable, after a hard day's work in a shop or factory, to profit by evening instruction to the same extent as if this instruction were given to them during the day. We have found from experience that after a boy reaches seventeen or eighteen years of age he is very much more able to carry this night instruction.

In these continuation schools, one of the most suggestive arrangements is the close correlation of the theoretical foundations of each trade with the instruction in the processes of the trade. For instance, the mathematics of the school is mathematics of the shop, whether the trade is jewelry, shoemaking, or carpentry. The same is true of the machinist's mathematics. Similarly, the drawing of the school is the drawing of the shop. The problems which the boy finds in the shop today are dwelt upon at length in the school tomorrow. In the same way the closest possible relation of the sciences, physical or biological, to the trade, is maintained. The youth learns also the history of his trade. He studies civics and the proper use of his mother-tongue in relation to his calling.

From the continuation school the youth, at eighteen or nineteen years of age, enters the army, where, for at least two years, he is under systematic educational influences. The German nation has been unwilling to allow the youth after he leaves the elementary school to be without some systematic education until he reaches the age of citizenship.

I mention this German system because it is an example of the most intense endeavor to adjust men and women to their environments. For more than a generation past, Germany has realized its responsibility in this direction and it has endeavored to solve its problem in a most thoro method. The effect of the extraordinary system of technical and industrial education which it is following has made its presence felt on the progress of German industry and commerce. Before the Franco-Prussian War Germany was, industrially and commercially, a rather unimportant nation. After German unity had been accomplished, the nation devoted itself to the development of its educational system and to the elevation of its industry and commerce. As a result, the nation has become one of the most important manufacturing and commercial countries of the world, a tremendous rival in that respect of other progressive nations. While Germany's educational system is not the sole cause of its prosperity, it is, nevertheless, one of the most important causes and, by the Germans themselves, it is regarded as the leading cause. And what is true of Germany is also true to a great extent of several other European countries.

Manual training, as pursued in the United States, is but an elementary conception of the German idea, a system more desirably adapted to a democracy. Our absence of monarchical institutions and our dislike for them would not permit us to pursue the forced methods that are in vogue in foreign lands. Nevertheless, the underlying motive is much the same with us as in European countries. After all, we are endeavoring, just as they are doing, to provide educational opportunities that will enable a man to make the most of his natural capacities, his industry, and his character, whatever his origin in life may have been. We are attempting to train our youths in such a way as will best enable them to adjust themselves to their environments and the needs of the community in which they live.

Manual training is a valuable adjunct in the adjustment process because it encourages the development of the creative power within the child. Every child is gifted with some degree of this power, and true education is that which brings out this inherent ability. Growing communities need men and women who can create as far as it is possible for human beings to create, and manual training is the education by which these creative talents are developed. It stimulates the imagination into fields of practical endeavor, and the type of education which stimulates the imagination in this way performs a function in the assets of the community which cannot be measured merely by immediate productiveness. One brain fertile with new ideas may be the means for increasing and manifolding the industries of a given region. The increment which comes to a country by reason of its natural resources is not unlike the additional earning power which is made possible by time- or labor-saving devices. The educational system which will produce even a few brains, which can simplify or clarify inefficient methods of using labor, produces an added fruitfulness to both capital and labor, far in excess of what would be produced by any slight increase in the degree of skill which may be in the possession of a mass of semi-skilled or skilled operators. And the basis of such education is manual training and industrial emphasis.

Each community must learn its own problems and adjust its educational system, to some extent, to meet its own needs. Industrial schools in various parts of the country must supply the demands of the communities in which they are located and this can only be done if those persons who are responsible for the curriculum and progress of these schools will make a careful study of their immediate environments and use the results of this study as a basis for their work. As these schools are established and developed, it is well that educators meet together to compare and to exchange thoughts and ideas. On such occasions the labors and experiments of various communities may be discussed and studied and thru this means a national adjustment may be brought about—an adjustment between the individual schools of the country and the needs of the entire

nation, bearing in mind all the time that the individual school must first serve the needs of its own environment.

In Pittsburgh, as perhaps in some other large cities, experiments have been made in four forms of industrial education. The old-fashioned apprenticeship system, which has for its object the output, with an incidental emphasis on varied skill, has been modified to meet new industrial conditions. A second type of industrial education has been patterned after the continuation schools of Europe, with evening instruction to supplement the practical shopwork. However, this system makes its appeal to but a small percentage of the whole apprenticeship group, as it involves additional effort on the part of each apprentice and an added labor which is often difficult to exact from these young men.

The third type of industrial education which has received considerable attention is the short-time, or intensive trade school. This method of teaching emphasizes skill and practice, and is measured largely by the quality of the skill and the speed of performance. This system has become a very popular one and is receiving the support of many persons. It comes as a natural step in the progress of industrial education, which is begun by the manual-training idea, and is another link in the chain of communal adjustment.

A new and fourth type of industrial education is now being formulated in the Day Industrial Course of the School of Applied Industries of the Carnegie Technical Schools, which, departing from the usual custom of emphasizing skill alone, is outlined to include a broad general foundation for habits of observation, initiative, and thoroness. It endeavors to train the mind and give a knowledge of processes, leaving the acquirement of exceptional skill to the student's after-career in gainful occupations. Special emphasis in these courses is placed on the necessity of the graduate's becoming a good citizen, having those principles of right living, personal hygiene, and a knowledge of the general industrial conditions of the country at his command to enable him to become resourceful in the event of necessity. The plan of instruction contemplates courses which comprise a group of correlated trades and industries so that the graduate may have a wide range of opportunity when seeking employment. We are supplying our community with hundreds of competent young workmen, all able to take their places in the proper development of the city's resources. Thus, environment is made to subserve education, and education to assist environment, for the general good of the whole community.

But whatever be the form of school or the system of education which is applied in any locality, this much remains: manual training is one of the most helpful adjuncts known today in the adjustment process. Therefore, we, who are responsible for this kind of education that is being offered, must realize the responsibility that is ours. The problem is a large one—too large to allow petty differences of opinion to stand in the way of proper

development. The task is most difficult and the workmen are none too many, however willing they may be. The time is ripe for industrial educators to cast aside all prejudices and factional disputes, to put all minor jealousies aside, and to join hands in the working out of this national problem.

Manual-training schools must not look with a suspicious eye upon trade schools; technical high schools must not decry vocational institutions. All of them must realize that there is a well-defined sphere for each of them, with plenty of work to be done by all. We must keep before our vision the ultimate goal that is ours—the aim to bring about a perfect adjustment between education and environment. We must realize that we are but the servants of a great nation, laboring as best we can to serve that nation's highest needs. We have the opportunity at hand to blaze the path thru the wilderness of doubt and of necessity into the clearer fields of achievement and success.

What will the future bring to us in our endeavor? Will it bring us substantial and abiding success or will it hold for us but the shifting sands of temporary attainment? The answer to this question depends upon whether we are prepared to go forward in unison and in harmony. If so, we need have no fear of the coming days—we can trust to the common-sense of the American people to support us and to encourage us.

We may well feel that every man and woman, who realizes that the resources of the nation cannot be fully developed until we have brought about a proper relation between our needs and our abilities, will understand that adjustment to environment is the fundamental principle which makes for the country's success; and we may be sure that not the least important of the causes which will contribute to this final adjustment will be this same system of manual training and industrial education of which we speak today.

DYNAMIC VALUE OF MANUAL ARTS IN THE PUBLIC-SCHOOL SYSTEM OF EDUCATION

T. D. SENSOR, DEPARTMENT OF PUBLIC INSTRUCTION, TRENTON, N.J.

We are endeavoring to separate intellect and manual labor; we want one man to be always thinking and another to be always working, and we call one a gentleman and the other an operative; whereas the workman ought often to be thinking and the thinker often to be working, and both should be gentlemen in the best sense. As it is, we make both ungentle, the one envying, the other despising, his brother; and the mass of society is made up of morbid thinkers and miserable workers.

This was John Ruskin's viewpoint a number of years ago. The question is one for consideration as to whether it is correct at the present time to apply such a viewpoint to present-day conditions. Public education comes in for many criticisms. This association has undertaken at different times to lay down fast rules as to what should constitute the proper curriculum

for the ideal child to pursue in order that he should be properly educated. In spite of the accumulation of wisdom in the past we are facing an active spirit of rebellion and a tendency on the part of radical thinkers to repudiate the wisdom of the ages and inaugurate a new régime.

For more than sixty years industrial education in some form has been knocking at the doors of the academic world and at last it is receiving a smiling welcome where its earlier approaches met with frowns. To do and not merely to know how to do, is being made the test in modern educational circles. Theory has run its course and has been more than glorified. The world now demands action and measures all things by results. A cook is a cook because he or she can cook things that a hungry man can eat and not run the risk of ruining his powers to eat again, not a cook by reason of having written a book containing recipes for dishes that never turn out edible. The world applauds the man who flies, not the one who writes a book on specific gravity and is drowned in his own conceit.

The problem of the schools is not so much the psychologic theory of how it can be done but the doing of it. The world does not so much want us to make some specific thing as it wants us to have the power to make things. To secure this power is, then, the present problem of the public-school system. If in satisfying the universal demand, traditions have to be violated, they will have to go. We may cling to them, but the flap of the tail of the aeroplane will fling them down and progress will not be stayed.

Can manual arts rejuvenate this dead traditional monster which we call the Public-School System of Education? Has manual arts a dynamic value? Is it a force that can produce results rather than talk or write about results? Many wise and good men of our number are skeptical and when approached begin at once to discuss the ethical value of academic training.

Experience, that expensive teacher, on the other hand, is regularly confounding them by proving that the man who does things can be as highly cultured as the man who only thinks of doing things. All force is easily divided into active and latent. It is not so easy to establish the relative value of each. "The man behind the gun," is apparently as necessary as the gun, but results come quickly when the two are working in harmony. It is much the same with manual arts and education.

The child from any point of view is a creature of activity, but his activity is not alone mental; he begins to "kick and yell" before he begins to reason, and the nurse tells us that if we would have a healthy baby we must give him plenty of physical activity; and the psychologist tells us we must not begin too soon to awaken his mental faculties. This seems to give us the starting-point we want; namely, as physical activity comes first there should be no good reason for reversing the situation as soon as the child starts to school. Dickens once told us an interesting story of the results that come from grad-grind methods. His imagination was dealing with facts rather

than fancy. We believe that the value of manual arts in public-school education can best be shown by the true story of two bad boys—boys who, having exhausted all their interest in academic training looking at it from their viewpoint, had, because of persistent truancy, proved that they had lost all interest in school work as presented to them; who had, without seeking to do so, earned the title of bad boys—incorrigible boys—who only came to school when brought in by the truant officers; boys whose reputation had steadily grown worse both in school and out; who when in school destroyed the possibility of the teacher to do effective work with the thirty-eight other children in the school and when out of school were credited with all the wrongdoing of the community in which they lived. These two reputed bad boys had reached the ages of thirteen and fourteen years. They had failed to make passing marks in spelling, arithmetic, grammar, or geography. The three R's had failed to interest them because from their viewpoint of life they had found no use for them At the beginning of the school year the teacher, having acquired the ability, presented to them a problem in cardboard construction which caught their attention, aroused their interest, and for the first time gave them a rational reason, from a boy's point of view, for using arithmetic and other academic subjects. The particular problem was the construction of a model of the school building, a four-room building with a belfry. It was to be made to scale. With a reason for learning compound numbers they learned them quickly. With this start the boys were saved. Manual art became the power that influenced them in the right direction. Today one of these boys is finishing his fourth year in the high school; the other because of home conditions was compelled to leave school and is filling with credit and profit a respectable position in which he is earning an honest living. It is such concrete examples as this that prove with no fear of contradiction the dynamic value of manual arts in the public-school system of education.

No amount of tradition can halt the cry for more practical results from the work of the school. The manual arts bring the opportunity for the schoolman to meet the demand. Culture, yes, but not culture that fails to produce a citizen who is able to succeed in supporting himself and providing for his family. The boys should be trained for the duties of husband and father, the girls should be trained for the duties of wife and mother. Any training of the children in our public schools which falls short of this, has failed, and miserably failed. The dynamic value of manual arts in accomplishing this has been proved over and over again, yet there are still those who must be shown. Let us, my fellow-teachers, teach boys and girls to become men and women and forever cease teaching curricula based upon textbooks—textbooks prepared to sell rather than to develop power. If the world wants workers, and we believe that is what it wants, we must use means to secure workers.. The introduction of manual arts into the program of the schools and the kindergarten, and seeing that every grade has work adapted

to its powers will accomplish a new development, and with skilled teachers to handle the work there will be no question of the kind of workers that will be produced. The stumbling-block today in the quick securing of results is in the incompetency of the supervising and teaching force. There must be radical changes in the plans of normal schools in training teachers. That training which is needed by the masses must become the major part of their work. Books which represent academic education must give place to training in the manual arts. The pupil must be trained to find himself industrially as well as academically. He must be adjusted as soon as possible to the world of industry, for it is there in that world he must earn his living and the living of those who will be dependent upon him. The great force that will make possible such a training for the future citizen will come from manual arts. Their dynamic value is as yet unmeasured, but the general public is beginning to believe that great power is stored therein. Like the great reservoirs which supply the dynamic power for agriculture this phase of education will work as wonderful marvels as are wrought in the face of the desert when the sluices are opened.

A Burbank does not theorize about plant life, he experiments. The introduction of the manual arts into the public-school curriculum is the direct application of the practice of experiment to the life forces of the child. The experiment is not so much to find out what the relation of unknown parts may be, as to separate the child from himself to the extent of utilizing the powers that are latent in him. Nothing so quickly brings to light these hidden forces as the practice of manual arts. Under book training they lie dormant or are prematurely developed to wither and die when the fierce sun of life strikes upon them. Men without any book knowledge have made their mark upon the pages of history but in this problem of education which is to be solved in the immediate future, we are not thinking of the man who is to stand out as a leader, we are thinking of those who are to be led. The masses are to be better cared for in the future. Manual arts in our system of public education will do it, and will be the dynamic power to accomplish the desired result.

THE REQUISITES OF THE EFFICIENT TEACHER IN INDUSTRIAL SCHOOLS

GEORGE W. GERWIG, SECRETARY, BOARD OF CONTROLLERS, ALLEGHENY SCHOOL DISTRICT, ALLEGHENY, PA.

Taking for granted the usual standard qualifications of an industrial teacher, let us consider his relationship (1) to scientific management; (2) to education as a whole.

In his own department the industrial teacher should be a constant model of the best methods, a living personification of the best shop practice. Skill is merely the habit of doing anything in the best possible way. It is therefore his duty not merely to be a skillful teacher, but a teacher of skill itself.

Two words are at present electrifying the industrial world—scientific management. They contain a message for every teacher, and establish a new set of specifications for the industrial teacher.

These two words, and the revolution they herald, come as a shock to some manufacturers and to some mechanics. To others they come as a prophet of new power. To still others—the helplessly old or the helplessly obsolete either in mental methods or in shop methods—the shock will perhaps be so severe that it will mean electrocution and elimination. For when the application of scientific management enables a laborer to load 74 tons of pig-iron a day instead of $12\frac{1}{2}$ tons or to treble his capacity in shoveling coal, or enables a machinist to gain from 400 to 800 per cent in certain operations, or teaches a bricklayer how to lay 2,700 bricks a day instead of 1,000, the disadvantage of pursuing the old methods becomes too obvious for comment.

Every teacher owes it to himself to investigate scrupulously all his methods of mind and of hand, and to face the question "Does scientific management mean anything to me, to my school, to my methods?"

The great gain made by scientific management comes in two ways: (1) by eliminating all unnecessary movements; (2) by establishing proper relaxation or recreation periods. These general fundamental principles of economy and efficiency have a similar application in the educational world.

In Germany the schoolmaster revolutionized the business and industrial life of the entire nation. It would be a singular educational calamity if the American schoolmaster, instead of being fully awake to his obligation to discover new principles of economy and efficiency in his work, should be found so fast asleep that he had to be waked up and taught by the business man.

Is it possible that in general school work we are wedded to methods which are one-fourth efficient? Can it be that a child could be taught twice or three times as well, or in one-third of the time that is now the standard?

Word has just reached America that a noted educator of Italy, Maria Montessori, has applied some of the principles of scientific management to the subjects of reading and writing, teaching these subjects thru the sense of touch instead of thru the eye, with results which seem incredible when one contemplates the saving—50 per cent—but entirely to be expected when one studies the method.

Whether the general teacher can or cannot afford to wait until the business world forces him to reorganize his "shop practice," the industrial teacher must, if he holds his place, be at least fully abreast of the things which scientific management has to offer. And the industrial teacher should of course be pre-eminently the one in America, who, like his colleague, the German schoolmaster, is teaching the entire nation that type of skill which consists in doing things in the best possible way. Let every industrial

teacher, therefore, be a veritable dynamo generating and distributing this new current of light and power—the best in scientific management.

One thing more is vitally necessary. The industrial teacher should not mistake his particular segment of the educational circle for the entire circle. He should have the true conception of education as a whole in his mind with absolute clearness and in all his work with absolute sureness.

If the circle of life were like the circle of art or mechanics, the teacher's problem would be simple. A pupil might start anywhere and go around like one leg of a compass, forward or backward, serenely conscious that either route would lead in time to the same destination. But destinies are not so easily handled as drawings. In life the journey must begin at birth, its progress must be forever forward, it must lead thru a carefully graded sequence of experience, physical, mental, and spiritual, on to the door of death, in the hope, not that the circle has been completed, but that this portion is only an arc pointing inevitably on to eternity. The educational circle should also be the emblem of infinity.

While it is the laudable hope of every schoolmaster that every pupil may have the privilege of the entire circle of training, his practical experience teaches him that at best the formal training must be limited in a hundred ways, and no one pupil may hope to receive and no one institution offer more than a segment, large or small, of the entire circle. The problem is to hold firmly in mind a complete educational circle, with the industrial segment, the cultural segment, and each of the other segments in its proper place.

Let us consider together very briefly three phases of this problem: (1) What is an education? (2) How may it be acquired? (3) What relation does industrial training bear to the whole training?

The distinctively American educational ideals may be summarized in eight words—Education is training for service, and in service. The development of educational ideals has been singularly interesting. It began with the earliest records of the race. Plato and Socrates and Euclid advanced certain ideas in their day which no man who has lived since has been able to improve upon. The older education had some defects, but it had also some characteristics which are eternally right. Like the political and social systems of its day, it emphasized too strongly the prerogatives of the leader, whether king or priest or noble, and ignored what has become the cornerstone of our American life—the just claims of the many. It was in one form or another the education of privilege and of a limited culture rather than of service and of efficiency. As Kerschensteiner so wisely says in his *Education for Citizenship*, the old schools "date from a time when there were no citizens, but only subjects and rulers." The American ideal of an education, when it came in turn to supplant that of Greece and its beauty, of Rome and its power, of Germany and its learning, of England and its lords, demanded two things. It demanded (1) that every

pupil should be given an opportunity to develop all his powers; (2) that this training be dedicated to some superb service for his fellows. Under the old ideal an educated man must be in touch with the best that had been thought or felt in all the ages. Under the newer ideal he must in addition to all this be trained to a willingness and ability to render service. America demands a well-rounded man, recognizing that man is an immortal soul, before and after he is an engineer or an architect or an artisan of any kind.

This fundamental change in the conception of what constituted an education involved a corresponding change in the method of acquiring it. We are coming to see more clearly every day that there can be no educational trust, and no copyright upon an exclusive method. Beginning with the introduction of the sciences, the curriculum has departed more and more from pure scholasticism. It has recognized more and more that training for service might come to the body, mind, or soul by many routes. Each experience or activity in life is educating. The plea for an education thru agriculture is entirely proper, with, of course, certain limitations. The only real danger consists in one of the newer subjects making the same mistake scholasticism did and contending that it had a monopoly.

So well have the newer subjects of study demonstrated their right to a place in the curriculum that the battle has long been won. Schools of agriculture, engineering, and the industrial arts are on the increase everywhere. Perhaps the most radical change has been made in Germany. Fifty years ago German scholarship was pre-eminently theoretical; today, it is dominated by a zeal for practical achievements. So it happens that Kerschensteiner, when he makes his magnificent plea for continuation schools and for compulsory education in these schools until the age of eighteen, emphasizing "the importance of productive work in the whole scheme of education" strikes the keynote, not only for Germany, but for America and the world — training for service, and in service.

Neither child nor man is often privileged, in this world, to study all the subjects which he needs or desires. He should have the opportunity, however, to continue learning after he begins earning. It is the newer adjustment between earning and learning which is the distinguishing feature of the newer education. The plan of alternating between the shop and the classroom has come to stay, and it merely provides at this late day what William Penn stipulated in his "great law" in 1683; namely, that every child should be brought up to some trade or useful occupation.

Just as the perfect bill of fare or the balanced ration will provide all of the elements needed by the physical body, so a perfect course of study or scheme of education will provide all of the elements needed by the individual pupil, each in its proper place and in its proper proportion, and in a larger way, will provide the state with all forms of service necessary to be rendered. The ideal public school will offer each pupil, so far as possible, a trial trip in each of the different types of life. It will give him first the rudiments of

intelligent thought and action. It will help him to discover and develop any latent power he may possess. It will prepare him to reach a satisfactory and profitable adjustment between his ability and the world's needs. The ideal high school and university will develop the finest bodies and minds for the highest service and will become the expert adviser of all the people upon all subjects.

The special place and the special contribution of industrial training then becomes self-evident. The present movement will be most valuable and effective if it preserves what is best and vital in the old education and supplements it by adding those elements which are necessary for more immediate, more effective, and higher service to mankind. Let me emphasize that it can never be effective for any one segment of the educational circle to pose as the entire circle. It should no longer be necessary for a student to limit his training either to the cultural segment or to that portion of the whole which makes for efficiency alone. Immediate service should never be gained at the expense of supreme service. The well-rounded man or woman must have a well-rounded education.

The industrial teacher will preach and practice the right of a pupil to serve the state with trained hand as well as with trained head. He will demonstrate that the training of the head will always be better done when the tension is relieved by other lines of activity. The bulwark of nations in peace is always their skilled workmen. Industrial training will always be most potent in character building. It will contribute its quota to culture by leading to the better enjoyment of what is beautiful in life, in literature, and in art. It will constantly tend to make useful habits automatic. For nothing adds more to the real appreciation of any article than the attempt to make it, and the crafts have their greatest artistic power in the effort to make beautiful the common surroundings of life.

Man is not educated by books alone. Neither is he most effectively educated by things and events without books. Things and events represent the abstract. Both the child and the nation begin with the thing and grow toward the idea. Education is a gradual development from an ability to handle concrete things to an ability to handle both concrete and abstract things. The process begins properly with the body and with the material thing and grows as rapidly as possible toward the mind, the soul, and the immaterial. Every child has the concrete conception "dog," "hand," "mama," before it learns the abstract idea, or the word, or the sign which stands for the abstract idea. In cases of partial or arrested development the child may never acquire the ability to handle the abstract idea. A child in a feeble-minded institute may be taught to make a bed and may be able to add three beds and four beds but powerless to add the abstract three and four. The normal mind moves readily and quickly from the concrete to the abstract. The normal child passes readily on from arithmetic, which deals with concrete numbers and things, to algebra, dealing

with the abstractions in the first steps—the symbols which represent the easier abstract things; to plane and solid and spherical geometry each calling for an increased ability to think in terms of the abstract. The laborer deals with the object; the mechanic deals with both the object and the drawing which is the abstract representation of that object. The architect or inventor in addition to an ability to deal with both object and drawing has the power to deal with the more abstract idea or vision not yet reduced to either drawing or material form.

The ability to read a drawing or to make one is as truly the foundation of all industrial education as the ability to read a word or to write one is of all book learning. The interpreting or making of a drawing is properly therefore always the first step in any industrial training, being of value alike to workers of every craft, just as the ability to read or write a page is of value alike to students of every subject.

The ability to work out in *some* material the idea expressed in the drawing is the second step. Educationally the special material selected is of little consequence. It may be modified to suit various conditions. The important things are: (1) the training in reading a drawing and making one; (2) the construction from raw material of the object as drawn. Educationally this procedure has its greatest interest and value the *first* time it is used. Commercially, of course, value comes with greater skill and speed. The educational value decreases as the commercial value increases.

The old scholastic education was thought of as a thing apart from the actualities of life—something almost sacred. Its goal was culture. It was assumed, and fairly, that the mind and soul of man were of more importance than his body or the material things, that the "proper study of mankind is man." But it was assumed, unfairly, that an education and culture could only be acquired during certain years of one's life at a certain type of institution, from certain specified studies or books. It was contended, fairly, that the humanities, dealing with the best things man had thought and felt, constituted a proper material for training the mind and heart and soul; but unfairly, that a man was not educated and not cultured if his Latin accent proved defective.

Industrial training has been a proper reaction against this limited view of education and culture—a magnificent, significant recall to sound commonsense and first principles. It recognizes that a child is educated as he grows from a helpless little animal to a well-rounded, efficient man trained alike for present service and an immortal destiny, and that no single portion or phase of the process has a monopoly on the term education.

The special contribution of industrial training is that it trains alike the laborer who deals with the object, the mechanic who deals with object and drawing, and the inventor or architect who deals with the idea, the drawing, and the object. It trains not only for service but in service.

The greatest thing an industrial teacher can do for a pupil is to give that

pupil the right mental attitude toward his work. He should be guided to some little task or some lifetask which seems to him well worth doing. Then he should be inspired with a desire to do this particular piece of work as well as he can do it and as well as anyone in the world can do it He should realize with Solomon the Wise that "there is nothing better than that a man should rejoice in his work."

The industrial teacher, therefore, should continue valiantly to insist that men keep their feet upon the firm ground and their hands at useful and beautiful work. But he may modestly refuse to dogmatize and may even join occasionally with his humanitarian brother who prefers to continue keeping his head in the air, his spirit in the mountain tops, and his soul in the clouds.

DISCUSSION

E. Athelstan Ross, supervisor of manual training, Public Schools, El Paso, Tex.—I am glad that Mr. Connelley gave so much attention to the value of manual training in the selection of an occupation. This is noteworthy and significant coming from the head of the school which he represents.

Another important point is given in this statement that each community must learn its own problems and adjust its educational system to meet its own needs. This is a big thought and its practical application will require deep thinking and hard working. It will require years of experimentation. We all realize how diverse are the environment and the needs of different localities. In our public schools as at present organized in most cities the possibilities of adjustment to industrial environment are limited, unless radical reforms are introduced. Experience is fast bringing us to realize that something corresponding to the continuation schools of Europe is an absolute necessity. The stress has been more keenly felt in some localities than in others, and those of us who work in cities remote from the greatest stress can gain valuable suggestions from work already accomplished, and in the process of evolution in our greatest industrial cities.

I am sure that Mr. Connelley struck a responsive chord in many minds here when he stated that there is a place for all the schools now in the field, and that the problem is too big to allow of hindrances from any petty differences of opinion. Time and experience will determine what is worth while. The worthy will survive, but due credit must be given to every experiment which shall have aided in the solution of the problem.

In our new schools, our new courses of study, and our new methods, we must keep in mind the democratic American ideal of the best possible opportunities for all, with freedom for each to choose what he considers best, without coercion from outside human authority. To make this practicable the taste, the ideals, the mind of each individual must be carefully trained.

It is doubtless true that there are fewer responsible positions in the world than persons capable of filling such positions; but it is desirable, first, that a man should be the most capable possible in the work he has to do, even tho his opportunities may not be all that he might desire, or all that he might be able to fill adequately; and second, no matter what one's daily work, one should have developed as far as possible a taste for and appreciation of the beautiful in its various forms.

Paul Kreuzpointner, chairman, Industrial Committee of the American Foundrymen's Association, Altoona, Pa.—I desire to make certain corrections relative to the teaching in industrial schools. It seems to me too much attention is paid to the industrial schools of Germany. Frequently the continuation schools of Munich are held up as representative industrial schools of Germany. As a matter of fact, Dr. Kerschensteiner's

ideas have not yet been adopted in other parts of Germany. Switzerland, France, Belgium, and Austria have done as much along industrial educational lines as Germany has done outside of Munich. The paper does not give just appreciation of our work of teaching industrial education. The educators of this country have done more for industrial education than the industrial people have done, and we should give due credit to the work of the teachers. Permit me to say that the idea of industrial education is quite old in Germany. Emperor Charles the Great, during his reign in the tenth century, engaged men to teach agriculture to his subjects, and his wife and daughter personally taught weaving to the peasant women. An industrial drawing school was opened in Vienna in 1750, and in 1751 the Austrian government sent out traveling teachers to teach weaving to the villagers. Continuation schools were established in Munich in 1803. Long before I became an apprentice in 1856 the law compelled the employer to send his apprentices to the industrial continuation school up to the eighteenth year of age. In those days these schools were held on Sundays and holidays from 8 A.M. to 5:30 P.M. The guilds laid the foundation for the German industrial-school system, and this environment and history gives the European industrial schools their advantage. Our disadvantage lies in the newness of our schools, and time will correct this.

REPORT OF THE COMMITTEE ON COLLEGE-ENTRANCE REQUIREMENTS

To the Manual-Training Section of the National Education Association:

Your Committee on College-Entrance Requirements appointed at the Boston meeting of the Association, submits herewith the following report of progress:

Owing to the wide geographical distribution of the members of the committee, no meeting of the full committee has been possible since the time of its original appointment at the Boston meeting of the Association; but thru correspondence and thru conferences with most of the members of the committee, a plan of procedure has been agreed upon and a considerable amount of work has been accomplished.

It has been the belief of the committee that the purpose which this section of the National Education Association had in appointing this committee could be most effectively realized in the following ways: (1) by securing information regarding the growing tendency on the part of many colleges to be more liberal in their *definitely prescribed* entrance requirements; (2) by circulating such information as widely as possible among the proper authorities, urging other colleges to make similar reductions in their list of prescribed subjects; (3) by securing similar information regarding the increase in number of elective subjects which may be offered for admission to colleges, and especially by securing information regarding the colleges that have recently added shopwork, drawing, household science, and art to the list of their elective entrance subjects; (4) by urging other colleges to follow the lead of those that have given such recognition to the subjects.

It has been our aim to make our plea general for the granting to preparatory schools greater freedom in planning their courses of study to fit local needs, and to develop interests, tastes, and abilities of their students whom they serve. This, it is felt, would make it possible to concentrate time and attention on a smaller number of subjects, and thus improve the quality of the work in the preparatory school.

Wherever this broad principle is first recognized there should be comparatively little difficulty in securing the recognition, as elective subjects in the list of entrance requirements for which credit may be given, of shopwork, drawing, household science, and art—wherever these subjects are thoroly well taught and form part of a well-planned and approved four-year course of study.

In order to secure the information required to carry out this plan the committee sent to the presidents of a list of 167 colleges and universities the following list of questions:

a) Do the entrance requirements for the year 1911, for the regular undergraduate courses of the institution which you represent, differ in any way from the requirements during the past four years?
b) If so, what subjects have been added to the list of prescribed subjects?
c) What subjects have been omitted from the list of prescribed subjects?
d) What subjects have been added to the list of those in which there is freedom of choice?
e) What subjects have been omitted from the list of those in which there is freedom of choice?
f) At what date did these changes go into effect?
g) Have any changes in entrance requirements been announced to go into effect later than September, 1911?
h) If so, what subjects will be added to the list of prescribed subjects?
i) What subjects will be omitted from the list of prescribed subjects?
j) What subjects will be added to the list of those in which there is freedom of choice?
k) What subjects will be omitted from the list of those in which there is freedom of choice?
l) Are committees of your faculty or other persons definitely at work studying the question of entrance requirements, with a view to recommending possible changes?

Accompanying this list of questions were letters expressing the opinions set forth in this report, and asking in reply for an expression of views of the president, or executive officer, of each institution.

Replies were received from 141 institutions. Many of these contained detailed answers to all of the questions accompanied by letters fully expressing the personal views of the president or other administrative officer to whom our communication was referred. Because of the great volume of interesting material that has thus been obtained, it has not been possible to prepare an adequate report doing full justice to the subject in the time available. A brief description of the returns received, however, will be given.

The most conspicuous examples of the increased liberality in entrance requirements of the past year are the University of Chicago and Harvard College. The new requirements for admission to Chicago require credit in fifteen units, no conditions being permitted. These must be—

3 units in English;
3 units in a second major subject, which may be either Language, Science, Mathematics, or History;
2 units in a minor subject, which may be either a Language, Science, Mathematics, or History, but differing from the major subject;
2 more units in any of the above departments;
5 units in any subject that any approved school grants for its own graduation.

The Harvard plan requires evidence of work in English, history, language, science, and mathematics; no students with conditions will be accepted. Two majors must be offered in any of the above five subjects; four examinations must be passed as follows:

First: English;
Second: In a Language other than English;
Third: Mathematics or Science;
Fourth: Any of the list of five subjects—English, History, Foreign Language, Science, or Mathematics not already included in the first three examinations.

Many other colleges and universities have revised their requirements making them somewhat more liberal and granting greater flexibility to preparatory schools. A list of such changes is too long to include in this preliminary report, but it may be well to note that of the total 141 institutions that have been heard from, 62 have made changes in the direction of decreasing the number of prescribed subjects or increasing the freedom of electives.

Only 11 have increased either their total requirements or the definiteness of the list of subjects offered for entrance, while 53 have made no changes of any kind in their entrance requirements recently.

In considering the above facts, too, it should be remembered that many of the institutions that have made no changes in their entrance requirements are already among the list that have been most liberal in their requirements. It should also be remembered that the great majority of the 11 schools that have increased their requirements or have become less flexible than formerly in their requirements, are for the most part among the institutions that have had unusually low standards for admission. The actual facts, therefore, when all things are taken into consideration, are even more convincing than figures themselves appear.

They show conclusively that there is a tendency, which is rapidly increasing thruout the collegiate institutions of the United States, to recognize the broad principles for which this section of the National Education Association has been working. The other fact that is especially encouraging to the Manual Training Section of this Association, is the fact that 26 institutions have reported the comparatively recent addition of shop-work, drawing, household science, and art to the list of subjects which may be elected for college entrance.

The committee regrets that it has not been possible to analyze more fully the valuable data which it has received and to present it more in detail, but if it is the wish of the section, it would be glad to continue its work with the colleges and also to present next year a more complete report.

Respectfully submitted for the committee,

ARTHUR L. WILLISTON, *Chairman*

INSTITUTIONS WITH STATED REQUIREMENTS FOR ADMISSION AMOUNTING TO 12 UNITS OR MORE, DECEMBER, 1909

Adelphi College, Brooklyn, N.Y.	Charles H. Levermore, Ph.D.
Adrian College, Adrian, Mich.	P. W. Anthony
Albion College, Albion, Mich.	Samuel Dickie, LL.D.
Alfred University, Alfred, N.Y.	Rev. Boothe C. Davis, Ph.D.
Allegheny College, Meadville, Pa.	Rev. William H. Crawford, LL.D.
Alma College, Alma, Mich.	Rev. August F. Bruske, D.D.
Amherst College, Amherst, Mass.	Rev. George Harris, LL.D.
Baker University, Baldwin, Kans.	Wilbur N. Mason
Bates College, Lewiston, Me.	George C. Chase, LL.D.
Baylor University, Waco, Tex.	S. P. Brooks, LL.D.
Beloit College, Beloit, Wis.	Rev. Edward D. Eaton, LL.D.
Bethany College, Bethany, W.Va.	T. E. Cramblet, LL.D.
Boston College, Boston, Mass.	Rev. Thomas Gasson, S.J.
Boston University, Boston, Mass.	L. H. Murlin, S.T.B.
Bowdoin College, Brunswick, Me.	Rev. William DeWitt Hyde, LL.D.
Brown University, Providence, R.I.	Herbert Perry Faunce, LL.D.
Bryn Mawr College, Bryn Mawr, Pa.	M. Carey Thomas, LL.D.
Buchtel College, Akron, Ohio	A. B. Church, LL.D.
Bucknell University, Lewisburg, Pa.	Rev. John Howard Harris, LL.D.
Butler College, Indianapolis, Ind.	Thomas C. Howe, A.M.
Carleton College, Northfield, Minn.	Donald J. Cowling, A.M.
Case School of Applied Science, Cleveland, Ohio	Charles Sumner Howe, Sc.D.
Catholic University of America, Washington, D.C.	Rev. T. J. Shahan, D.D.
Central College, Fayette, Mo.	William A. Webb, A.B.
Central University of Kentucky, Danville, Ky.	Rev. F. W. Hinitt, Ph.D.
Clark College, Worcester, Mass.	Edmund Clark Sanford, Sc.D.
Clarkson School of Technology, Potsdam, N.Y.	William S. Aldrich, M.E.
Coe College, Cedar Rapids, Iowa	Dr. James A. Marquis
Colby College, Waterville, Me.	Arthur J. Roberts, A.M.
Colgate University, Hamilton, N.Y.	Rev. Elmer Burrett Bryan, LL.D.

College of the City of New York, N.Y.	John H. Finley, LL.D.
Colorado College, Colorado Springs, Colo.	William F. Slocum, LL.D.
Colorado School of Mines, Golden, Colo.	Victor C. Alderson, Sc.D.
Columbia University, New York, N.Y.	Nicholas Murray Butler, LL.D.
Cornell College, Mount Vernon, Iowa	James Elliott Harlan, LL.D.
Cornell University, Ithaca, N.Y.	Jacob Gould Schurman, LL.D.
Dakota Wesleyan University, Mitchell, S.Dak.	Rev. S. F. Kerfoot, D.D.
Dartmouth College, Hanover, N.H.	Rev. E. F. Nichols, LL.D.
Delaware College, Newark, Del.	George A. Harter, Ph.D.
Denison University, Granville, Ohio	Emory W. Hunt, LL.D.
DePauw University, Greencastle, Ind.	Rev. Francis J. McConnell, LL.D.
Dickinson College, Carlisle, Pa.	George Edward Reed, LL.D.
Doane College, Crete, Nebr.	Rev. David B. Perry, D.D.
Drake University, Des Moines, Iowa	Hill McClelland Bell, LL.D.
Drury College, Springfield, Mo.	Joseph H. George, D.D.
Earlham College, Richmond, Ind.	Robert Lincoln Kelly, Ph.M.
Elmira College, Elmira, N.Y.	Alexander C. MacKenzie, LL.D.
Fairmount College, Wichita, Kans.	H. E. Meyer, D.D.
Fordham University, Fordham, N.Y.	Rev. Daniel J. Quinn, S.J.
Franklin College, Franklin, Ind.	Melvin E. Crawelle, A.M.
Georgetown University, Washington, D.C.	Rev. Joseph Himmel, S.J.
George Washington University, Washington, D.C.	Charles W. Needham, LL.D.
Grinnell College, Grinnell, Iowa	I. H. T. Main, Ph.D.
Grove City College, Grove City, Pa.	Rev. Isaac C. Ketler, LL.D.
Hamilton College, Clinton, N.Y.	Rev. M. Woolsey Stryker, LL.D.
Hamline University, Hamline, Minn.	
Hanover College, Hanover, Ind.	William A. Millis, LL.D.
Harvard University, Cambridge, Mass.	Abbott Lawrence Lowell, LL.D.
Haverford College, Haverford, Pa.	Isaac Sharpless, LL.D.
Hillsdale College, Hillsdale, Mich.	Joseph W. Mauck, LL.D.
Hiram College, Hiram, Ohio	Miner Lee Bates, A.M.
Hobart College, Geneva, N.Y.	Rev. Langdon C. Stewardson, LL.D.
Holy Cross College, Worcester, Mass.	Rev. Thomas E. Murphy, S.J.
Illinois Wesleyan University, Bloomington, Ill.	Theodore Kemp, D.D.
Indiana University, Bloomington, Ind.	William Lowe Bryan, Ph.D.
Iowa State College, Ames, Iowa	Albert Boynton Storms, LL.D.
James Millikin University, Decatur, Ill.	Albert R. Taylor, Ph.D.
Johns Hopkins University, Baltimore, Md.	Ira Remsen, Ph.D.
Kenyon College, Gambier, Ohio	Rev. William F. Pierce, A.M.
Knox College, Galesburg, Ill.	Thomas McClellan, LL.D.
Lafayette College, Easton, Pa.	Rev. Ethelbert D. Warfield, LL.D.
Lake Erie College, Painesville, Ohio	Vivian B. Small, A.M.
Lake Forest College, Lake Forest, Ill.	John S. Nollen, Ph.D.
Lawrence College, Appleton, Wis.	John T. Bushey
Lehigh University, So. Bethlehem, Pa.	Henry S. Drinker, LL.D.
Leland Stanford Junior University, Stanford University, Cal.	David Starr Jordan, LL.D.
Lombard College, Galesburg, Ill.	Rev. Lewis B. Fisher, D.D.
Macalester College, St. Paul, Minn.	T. Morey Hodgeman, LL.D.
Marietta College, Marietta, Ohio	Alfred T. Perry, D.D.
Massachusetts Institute of Technology, Boston, Mass.	Richard C. Maclaurin, LL.D.

Miami University, Oxford, Ohio	
Middlebury College, Middlebury, Vt.	John M. Thomas, D.D.
Mount Holyoke College, So. Hadley, Mass.	Mary E. Woolley, Litt.D.
New York University, New York, N.Y.	Elmer Ellsworth Brown, LL.D.
Northwestern College, Naperville, Ill.	Rev. H. J. Kickhoefer, Ph.D.
Northwestern University, Evanston, Ill.	Nathan W. Helen
Oberlin College, Oberlin, Ohio.	Rev. Henry Churchill King, D.D.
Ohio State University, Columbus, Ohio.	Rev. William O. Thompson, LL.D.
Ohio University, Athens, Ohio.	Allston Ellis, LL.D.
Olivet College, Olivet, Mich.	Ellsworth G. Lancaster, Ph.D.
Pennsylvania State College, State College, Pá.	Edwin E. Sparks, LL.D.
Polytechnic Institute, Brooklyn, N.Y.	Fred W. Atkinson, Ph.D.
Pomona College, Claremont, Cal.	Rev. William Horace Day, LL.D.
Princeton University, Princeton, N.J.	
Purdue University, Lafayette, Ind.	Winthrop Ellsworth Stone, LL.D.
Randolph-Macon College, Ashland, Va.	R. E. Blackwell, LL.D.
Randolph-Macon Woman's College, Lynchburg, Va.	William W. Smith, LL.D.
Ripon College, Ripon, Wis.	Frank Morton Erickson, A.M.
Rose Polytechnic Institute, Terre Haute, Ind.	Carl Leo Mees, Ph.D.
Rutgers College, New Brunswick, N.J.	Dr. W. H. S. Demarest, LL.D.
State University of Iowa, Iowa City, Iowa.	John G. Bowman
State University of Kentucky, Lexington, Ky.	James K. Patterson, LL.D.
State University of North Dakota, Grand Forks, N.Dak.	Frank L. McVey, Ph.D.
State University of Oklahoma, Norman, Okla.	A. Grant Evans, D.D.
Stevens Institute of Technology, Hoboken, N.J.	Alexander C. Humphreys, LL.D.
Swarthmore College, Swarthmore, Pa.	Joseph Swain, LL.D.
Syracuse University, Syracuse, N.Y.	Rev. James Roscoe Day, LL.D.
Transylvania University, Lexington, Ky.	R. H. Crossfield, Ph.D.
Trinity College, Durham, N.C.	Rev. John C. Kilgo, D.D.
Trinity College, Hartford, Conn.	Flavel Sweeten Luther, LL.D.
Trinity College, Washington, D.C.	Sister Julia
Tufts College, Tufts College, Mass.	Rev. F. W. Hamilton, D.D.
Tulane University of Louisiana, New Orleans, La.	Edwin B. Craighead, LL.D.
Union University, Schenectady, N.Y.	Rev. Charles A. Richmond, LL.D.
University of Arizona, Tucson, Ariz.	Kendrick Chas. Babcock, Ph.D.
University of California, Berkeley, Cal.	Benjamin Ide Wheeler, LL.D.
University of Chicago, Chicago, Ill.	Harry Pratt Judson, LL.D.
University of Cincinnati, Cincinnati, Ohio	Charles W. Dabney, LL.D.
University of Colorado, Boulder, Colo.	James H. Baker, LL.D.
University of Georgia, Athens, Ga.	David C. Barrows, A.M.
University of Idaho, Moscow, Idaho	James A. MacLean, LL.D.
University of Illinois, Urbana, Ill.	Edmund Janes James, LL.D.
University of Kansas, Lawrence, Kans.	Frank Strong, Ph.D.
University of Maine, Orono, Me.	Robert J. Aley
University of New Mexico, Albuquerque, N.M.	William E. Milliken, Ph. B.
University of Michigan, Ann Arbor, Mich.	Harry Burns Hutchins, LL.D.
University of Minnesota, Minneapolis, Minn.	George E. Vincent, Ph.D.
University of Mississippi, University, Miss.	A. A. Kincannon
University of Missouri, Columbia, Mo.	Albert Ross Hill, LL.D.

University of Montana, Missoula, Mont.	Clyde A. Duniway, Ph.D.
University of Nebraska, Lincoln, Nebr.	Samuel Avery, Ph.D.
University of Nevada, Reno, Nev.	Joseph Edward Stubbs, LL.D.
University of North Carolina, Chapel Hill, N.C.	F. F. Venable, LL.D.
University of Notre Dame, Notre Dame, Ind.	Rev. John Cavanaugh, D.D.
University of Oregon, Eugene, Ore.	P. L. Campbell, A.B.
University of Pennsylvania, Philadelphia, Pa.	Charles C. Harrison, LL.D.
University of Pittsburgh, Pittsburgh, Pa.	Rev. S. B. McCormick, LL.D.
University of Rochester, Rochester, N.Y.	Rev. Rush Rhees, LL.D.
University of the South, Sewanee, Tenn.	W. B. Hall, A.V.C.
University of South Dakota, Vermilion, S.Dak.	F. B. Gault, Ph.D.
University of Utah, Salt Lake City, Utah	Dr. Joseph T. Kingsbury, Sc.D.
University of Vermont, Burlington, Vt.	Guy Potter Benton, D.D.
University of Virginia, Charlottesville, Va.	Edwin A. Alderman, LL.D.
University of Washington, Seattle, Wash.	Thomas F. Kane, Ph.D.
University of Wisconsin, Madison, Wis.	Charles R. Van Hise, LL.D.
University of Wooster, Wooster, Ohio	Rev. Louis Edward Holden, LL.D.
University of Wyoming, Laramie, Wyo.	Charles O. Merica, LL.D.
Vanderbilt University, Nashville, Tenn.	James H. Kirkland, LL.D.
Vassar College, Poughkeepsie, N.Y.	Rev. James M. Taylor, LL.D.
Wabash College, Crawfordsville, Ind.	Rev. George L. Mackintosh, D.D.
Washington and Jefferson College, Washington, Pa.	James D. Moffat, LL.D.
Washington University, St. Louis, Mo.	David F. Houston, LL.D.
Wellesley College, Wellesley, Mass.	Miss Ellen F. Pendleton
Wells College, Aurora, N.Y.	Rev. George Morgan Ward, D.D.
Wesleyan University, Middletown, Conn.	Rev. W. A. Shanklin, LL.D.
Western College for Women, Oxford, Ohio	J. G. Newman
Western Reserve University, Cleveland, Ohio	Rev. Charles F. Thwing, LL.D.
West Virginia University, Morgantown, W.Va.	Daniel B. Purinton, LL.D.
Whitman College, Walla Walla, Wash.	Rev. Stephens B. L. Penrose, D.B.
William Jewell College, Liberty, Mo.	Rev. J. P. Greene, LL.D.
Williams College, Williamstown, Mass.	Matthew Howell Reaser, Ph.D.
Wilson College, Chambersburg, Pa.	Harry A. Garfield, LL.D.
Wittenburg College, Springfield, Ohio	Rev. Charles G. Heckert, D.D.
Woman's College of Baltimore, Baltimore, Md.	Dr. E. A. Noble
Worcester Polytechnic Institute, Worcester, Mass.	Edmund Engler, LL.D.
Yale University, New Haven, Conn.	Arthur T. Hadley, LL.D.

Number of letters sent out to college presidents	167
Number of letters received in reply	137
Number of colleges not heard from	30

LIST OF COLLEGES NOT HEARD FROM

Adrian College	Drury College
Albion College	Fairmount College
Alma College	Fordham University
Bethany College	Franklin College
Boston College	Grove City College
Butler College	Hamline University
Case School of Applied Science	Harvard University
Catholic University of America	James Millikin University
Cornell College (Iowa)	Mass. Institute of Technology
Dickinson College	Oberlin College

Randolph-Macon Woman's College
State University of Oklahoma
University of Idaho
University of Mississippi
University of Utah
University of Vermont
University of Virginia
Washington and Jefferson College
Washington University
Western College for Women

LIST OF COLLEGES WHICH REPORT NO CHANGES IN ENTRANCE REQUIREMENTS DURING THE PAST FOUR YEARS AND WHICH CONTEMPLATE NO CHANGES IN THE NEAR FUTURE

Bucknell University
Beloit College
Boston University
Buchtel College
Clark College
Cornell University
Coe College
Colby College
Colgate University
Colorado College
Colorado School of Mines
Dartmouth College
Denison University
Georgetown University
Hillsdale College
Holy Cross College
Illinois Wesleyan University
Indiana University
Lafayette College
Leland Stanford Junior
Lombard College
Middlebury College
Mount Holyoke College
New York University
Ohio University
Polytechnic Institute
Purdue University
Randolph-Macon College
Ripon College
Rose Polytechnic Institute
Smith College
Swarthmore College
Trinity College (Durham)
Trinity College (Washington)
Tufts College
Wabash College
Wellesley College
Western Reserve University
Wittenburg College
Woman's College of Baltimore
Worcester Polytechnic Institute
University of Cincinnati
University of Kansas
University of North Carolina
University of Notre Dame
University of Oregon
University of Pennsylvania
University of Pittsburgh
University of Rochester
University of South Dakota
University of Vermont
Vanderbilt University
Wesleyan University

LIST OF COLLEGES WHICH REPORT ONLY SLIGHT CHANGES IN ENTRANCE REQUIREMENTS

Adelphi College.....All New York City high-school graduates admitted without question.
Alfred University.....Modern Languages permitted as electives.
Allegheny College.....Mediæval and Modern History; Freehand Drawing and Mechanical Drawing added to list in which there is freedom of choice.
Amherst College.....French, German, and Latin added to list of prescribed subjects.
Bates College.....Latin taken from list of prescribed subjects.
Baylor University.....Greek and Latin not required.
Bowdoin College.....Advanced Latin made elective.
Brown University.....Astronomy added to list of prescribed subjects.
Central College.....Trigonometry and Spanish added to the list of those in which there is freedom of choice.
Central University of Kentucky.....Solid Geometry omitted from required subjects.
Columbia University.....Advanced Algebra added to list.
Delaware College.....Arithmetic omitted from list. Chemistry and Botany added to list. One year of Modern Languages required.
Hanover College.....Manual Training added to list in which there is freedom of choice.

Hiram College	Manual Training, Agriculture, and Domestic Science added to list in which there is freedom of choice.
Kenyon College	Modern Language allowed for Greek in classical course. Mechanical Drawing, Shopwork added to list in which there is freedom of choice.
Lehigh University	Manual Training added to list in which there is freedom of choice.
Macalester College	Graduates of four-year accredited schools admitted without conditions.
Miami University	Solid Geometry omitted from required.
Northwestern College	Agriculture, Drawing, and Commercial subjects made electives.
Northwestern University	Commercial Law, Geography, and Physiology made electives.
Pennsylvania State College	Agriculture, Freehand Drawing, Mechanical Drawing, and Manual Training made electives.
Pomona College	Industrial and Applied Arts, Commerce and Agriculture added to list in which there is freedom of choice.
State University of North Dakota	Of the 15 units not more than five may be selected from Manual Training, Domestic Science, and Commercial subjects.
Stevens Institute of Technology	Elementary French omitted from list of prescribed subjects. Elementary French, Spanish, Italian, Greek, Physiography, and Physiology, are added to list in which there is freedom of choice.
Syracuse University	Adopted unit system.
Trinity College	Botany, Zoology, and Physical Geography cut off from list of options.
Tulane University of Louisiana	Solid Geometry now prescribed instead of elective.
University of Arizona	Total number of units made $15\frac{1}{2}$ instead of 16.
University of Georgia	All Carnegie units allowed except music. Agriculture added.
University of Illinois	Manual Training, Agriculture, Bookkeeping, Business Law, and Domestic Science added to list of options.
University of Maine	1 point of electives added to requirements for admission.
University of Minnesota	Business subjects, Manual subjects, Domestic Science, and Art made optional.
University of Missouri	Only changes made give greater flexibility.
University of New Mexico	Trigonometry and Civic sections made compulsory.
University of Nevada	Advanced English, Mathematics, and History made optional.
University of the South	Entrance requirements reduced from 15 to 14 units.
University of Washington	Civics omitted from list of prescribed subjects.
University of Wooster	Mechanical Drawing made optional.
University of Wyoming	Much larger liberty of selection. 5 units out of 15 in technical subjects may be offered in technical colleges after September, 1911.
University of Wisconsin	Manual Arts, Agriculture, Commercial work, and Domestic Science made optional.
Wells College	4 years instead of 3 required for English.
W. Virginia University	Diminished prescribed and increased electives.
Whitman College	Greek omitted from prescribed subjects. Mechanical Drawing, Manual Training, and Music made optional.

Wilson College.....No subjects added to list of prescribed subjects, but more work required in those which are prescribed.

LIST OF COLLEGES REPORTING MORE EXTENSIVE CHANGES IN ENTRANCE REQUIREMENTS

Baker University—Fifteen units are necessary for unconditional admission to the college. A temporary deficiency of not more than two units will be permitted. One unit from the following vocational subjects: Woodwork, Drawing, Domestic Art, Domestic Science, Agriculture, Bookkeeping, Commercial Law, Commercial Geography.

Bryn Mawr College—Change in Latin requirements. Prescribed books for reading in Latin. No changes to go into effect after September, 1911.

Carleton College—Graduates from Minnesota state high schools or from schools of equivalent rank are admitted on presentation of certificates from proper authorities, showing the kind and amount of work completed and representing a total of at least fifteen units, provided that the credits offered include English Composition and Literature; Elementary Algebra; Plane Geometry; Latin Grammar for B.A. course; and Chemistry, Biology, and Physics for B.S. course. No changes proposed to go into effect later than September, 1911.

Case School of Applied Science—Arithmetic added to list of prescribed subjects. Botany, Drawing, Shopwork, Latin, Greek, German, French, Trigonometry, History, Astronomy, and Zoölogy added to list of options. No changes noted to go into effect later than September, 1911.

Central University of Kentucky—Solid Geometry added to list of those in which there is freedom of choice and omitted from list of prescribed subjects. Foreign Languages and Drawing and Agriculture added to list of options. No changes noted to go into effect later than September.

Clarkson School of Technology—Governed by New York State Education Department thru which all matriculation must be effected for the institution. No changes noted for later than September, 1911.

College of the City of New York—Advanced Algebra, Trigonometry, Drawing, Elementary Physics, transferred from prescribed to elective list. Physical Instruction and Hygiene added to elective list. No changes noted to go into effect later than September, 1911.

Dakota Wesleyan University—Requirements increased to fifteen standard units. Students entering the scientific course may substitute German for Latin thruout the preparatory course. A year of standard commercial work added to the list of subjects in which there is freedom of choice. No changes noted to go into effect later than 1911.

Doane College—Required credits raised from twenty-eight to thirty points. Agriculture, Bookkeeping, Geology, Political Economy, have been added to the list in which there is freedom of choice. Not more than four points accepted from this list. Out of twenty-one prescribed subjects fifteen have been made optional.

Drake University—Requirement of one unit of Physics has been removed. Applicants must come from accredited schools as graduates. Shopwork, Business subjects, Physiology, Pedagogy, added to list of options. Music omitted from list of options. Physics omitted from list of prescribed subjects. These changes went into effect in the fall of 1909. No changes noted for later than September, 1911.

Earlham College—One unit only accepted in Manual Training, Domestic Science, Mechanical Drawing, and Bookkeeping. Total electives not to exceed three. No changes noted for later than September, 1911.

Elmira College—See catalog for entrance requirements, Courses I to IV.

Grinnell College—Requirement in Languages reduced from six to four years. Arithmetic (after Algebra), U.S. History (after General History), Civics, Manual Training, added to list in which there is freedom of choice. These changes went into effect in September, 1910, except Manual Training which went into effect two years earlier. No changes noted for later than September, 1911.

Hamilton College—All subjects required.

Hobart College—No longer accepts one year of any Language. Greek omitted from the list of prescribed subjects. Drawing added to list in which there is freedom of choice. Geology and Physiology omitted from the list of those in which there is freedom of choice. Greek dropped 1909. No changes noted to go into effect later than September, 1911.

Iowa State College—Agriculture, Commercial Law, Industrial History, Domestic Science, and Bookkeeping added to list of subjects in which there is freedom of choice. No changes noted to go into effect later than September, 1911.

Johns Hopkins University—Entrance Requirements revised five years ago. Inclination has been to increase the range of choice, allowing greater freedom on the part of secondary schools. It has not been the custom to accept for admission such subjects as Mechanical Drawing, Manual Training, and Art.

Lake Erie College—One year of Language omitted from list of prescribed subjects. One year of Language, Solid Geometry, Music, added to the list in which there is freedom of choice. No changes noted to go into effect later than September, 1911.

Lake Forest College—Solid Geometry and a third year of English added to list of prescribed subjects. Commercial Geography, Drawing, Economics, Physiography, added to list of options. Latin not required if four years are offered in one Modern Language.

Lawrence College—Credit given for vocational studies has been increased. Commercial studies, Mechanical Drawing, Domestic Science, Manual Training, Art, Music, have been added to list of those in which there is freedom of choice. These changes went into effect two years ago. No changes noted to go into effect later than September, 1911.

Marietta College—Now requires only two years of Latin as a minimum instead of three. One and one-half units in Algebra required instead of one; and two, three, or four units in any Foreign Language. No prospect of change in the future.

Middlebury College—Latin has been added as one of the required subjects for S.B. degree, optional with French and German. Modern and Mediæval European History added to the list of those in which there is freedom of choice. Advanced Algebra omitted from the list of those in which there is freedom of choice. No prospect of change in the future.

Ohio State University—Additional units prescribed in certain colleges. In Colleges of Arts, Education, and Engineering, requirements raised from two to three units in 1909. Prescribed units in certain colleges have been reduced. In Colleges of Arts, Education, and Engineering, requirements in History and Science reduced from two units to one unit in 1909. No prospect of change to go into effect later than September, 1911.

Olivet College—Art, Music, Manual Training, Commercial work, have been added to the list of prescribed subjects. Chemistry has been added to the list in which there is freedom of choice. Agriculture will be added as soon as high schools qualify applicants.

Princeton University—The only changes of importance in entrance requirements concern the Department of Civil Engineering. (See catalog pp. 79–81.)

Rutgers College—Plane Trigonometry added to required subjects for S.B. course. For the general S.B. course a revised list with greater freedom of choice was drawn up in 1910. In 1912 an additional point in Language, History, or Science will be required for entrance to the technical S.B. courses. A policy has been adopted which will bring requirements for all courses to a level of fifteen points.

State University of Kentucky—Changes have been announced to take effect on and after September, 1911. Solid Geometry will be omitted from all courses except Engineering, Mathematical, and Physical Science courses. One unit in any science may be offered instead of one unit in Physics. One unit in Latin may be offered by those entering the classical course. One unit in History may be offered instead of one unit in Ancient History.

Transylvania University—Solid Geometry added to list of prescribed subjects. One year of History, two units of Foreign Language. Spanish, Manual Training, Mechanical Drawing, and Domestic Science, added to the list of those in which there is freedom of choice. Changes have been announced for 1912. Ancient instead of General History will be insisted

upon and one unit of a Foreign Language may not be offered unless three to four units of another be offered.

Tulane University of Louisiana—Solid Geometry is now prescribed instead of elective. No prospect of change in requirements for 1912.

Union University—Certificates accepted for high-school graduates. Latin no longer accepted as an equivalent for Modern Languages in S.B. courses, and Chemistry no longer accepted as an equivalent for Physics in S.B. courses. No changes noted to go into effect later than September, 1911.

University of California—Parts of Latin, Greek, Mathematics, Science, according to group and college selected by applicant, have been omitted from prescribed list. General Science, Agriculture, Industrial Arts, Music, Economics have been added to the list in which there is freedom of choice. Requirements have become reasonably staple. No radical changes proposed.

University of Chicago—Certain subjects have been added to the accepted list of subjects. A definite requirement in Latin, Solid Geometry, and Physics has been added to the list of prescribed subjects.

University of Colorado—Electives may now be chosen from the following: Mathematics (2), Greek (2), French (2), German (2), Spanish (2), History (2), English (1). From the following group, subject to special accrediting by the University not more than three units: Drawing (1), Manual Arts (2), Domestic Science (1), Agriculture (1), Commercial Geography (½), Economics (½). The candidate for admission should present fifteen units as follows: Mathematics 2, Language other than English 4, English 3, History 2, Science 2, Electives 2.

University of Michigan—The entrance requirements of the Department of Law going into effect September, 1912, require that students shall present one year of collegiate work in addition to the entrance requirements of the University.

University of Montana—Entrance credit is now given for all subjects in the official courses of study for Montana high schools which are properly certified as having been taken by the applicant. One year ago this new regulation, entitling a graduate to unconditional entrance provided he has completed a four-year course in an accredited high school, went into effect.

University of Nebraska—Entrance requirements raised from twenty-eight to thirty points. Bookkeeping, Normal Training, Senior Reviews, added to list of prescribed subjects. After September, 1911, Music, Commercial Geography, etc., may be accepted if taught in an accredited school.

Vassar College—Greater range of choice in entrance requirements. No change in amount. American History or Elementary Greek may be offered in place of third Language or Science. The change went into effect, September, 1910. No change noted for September, 1911.

William Jewell—One year German added to science course. One year Latin from science course replaced by one year German. Civics, preceded by American History, has been added to the list of prescribed subjects. Astronomy omitted from the list of those in which there is freedom of choice. No changes in future now thought of.

Williams College—Abolition of the partial course makes every student a candidate for the degree with Latin, plus Greek or French or German. Botany, History, and Zoölogy have been added to the list of subjects in which there is freedom of choice, in order to fulfill elective requirement.

Yale University—Very little change in prescribed subjects. Alternative requirements are increased. Latin has been reduced in amount. Six books required instead of eight, in Vergil. Physics, Chemistry, and English or American History, and Civics have been added to the list of those in which there is freedom of choice. No further changes expected in the near future.

After the Report of the Committee on College-Entrance Requirements had been read, Professor Clark, of Leland Stanford Junior University, reported to the secretary a correction which should be added to this report, as follows:

Leland Stanford Junior University admits on diploma from accredited high schools without reference to course of studies, except that English is required.

THE NEW STANDARD OF THE PRESENT-DAY INDUSTRIAL EDUCATION IN EUROPE

PAUL KREUZPOINTNER, CHAIRMAN, INDUSTRIAL COMMITTEE OF THE AMERICAN FOUNDRYMEN'S ASSOCIATION, ALTOONA, PA.

Economic necessity was the impelling force which caused all industrial countries to establish new standards of industrial education during the past thirty years. The industrial countries of Europe especially were thus compelled, thru the ever-growing, keen competition, to reorganize their old-time drawing and continuation schools and put them upon a modern pedagogic and social-economic basis.

An inquiry, however brief, into the aspect and scope of the new pedagogic standards of European industrial schools may prove all the more interesting to the members of the National Education Association because our own educational system is now passing thru a period of transition; and while we have to develop our educational system upon the basis of our own educational and social traditions, political institutions, industrial development, and national characteristics, nevertheless as there are certain points of contact in the life of all industrial nations which are quite uniform, we cannot afford to ignore what other industrial nations are doing along industrial-educational lines.

While the methods applied to diffuse industrial education vary greatly in the different countries of Europe, the aim is universally the same, namely, increase of industrial, intellectual, civic, and moral efficiency of the industrial worker.

ENGLAND

The English Technical Institution Acts of 1889 and 1891 provided a tax for technical schools and the first result of the enactment of these laws was the establishment of many high-grade technical schools and colleges. However, these schools did not prove as beneficial as expected because they did not reach the class of workman the laws had aimed to reach. While much progress has been made during the last ten years, educationally, England has not yet evolved a satisfactory state-school system. Because of the absence of a law compelling attendance at these technical schools it is difficult to have the pupils attend regularly.

SCOTLAND

As in England, so in Scotland industrial education has made remarkable progress. Scotland is in advance of England in its system of continuation schools, compelling by law attendance at these schools. Four classes are provided in these continuation schools:

First Division.—Preparatory classes for the completion of general education.
Second Division.—Elementary classes for specialized instruction.
Third Division.—Advanced classes for specialized instruction.
Fourth Division.—Auxiliary classes.

FRANCE

As yet there is no unified system of industrial schools. They are either state, municipal, communal, departmental, or private schools receiving state aid. Again there are trade schools supported by trade unions, employers' associations, religious orders; but with the continued increase of the state grants these industrial schools are more and more under the control and the inspection of the state. At present there are more than five thousand of these schools. The continuation schools are organized under three divisions:

First.—For "illiterates." The attendance in these schools is poor because young men and women do not feel inclined to have it known that they are illiterate.

Second.—Those who have completed the elementary and higher elementary schools enter the second division of the industrial schools.

Third.—In this division are included trade schools, usually day schools, also technical courses in which the instruction includes drawing, geometry, and elementary science adapted to the need of the students. The practical, or shopwork is often carried on on Sundays in the shops of the trade schools.

SWITZERLAND

Education in Switzerland is free and compulsory. Each canton supervises its own schools with certain reservations by the federal government. The federal government subsidizes all cantonal, communal, corporate, or private industrial schools. Commercial schools, trade schools for girls, and domestic science schools are likewise subsidized.

In 1906 an apprenticeship law was passed which compels every employer to send his apprentices, boys or girls, to an industrial school at least four hours a week. It is optional with the cantons to adopt this law and thus far nearly half of the cantons have availed themselves of the opportunity.

There is one school for training technical teachers. In this school practical men are taught how to teach and academic school teachers are taught tradework. These industrial schools are classified as: Industrial drawing schools, industrial continuation schools, handicraft schools and trade courses, housekeeping and domestic science schools, trade and apprentice schools, industrial art schools, secondary technical schools, technical colleges, industrial museums.

GERMANY

Owing to pressure of economic conditions Germany has at present the most comprehensive system of industrial schools of any industrial country. At the beginning of the nineteenth century it was perceived in several German states that the elementary-school education needed to be supplemented by additional training in the usual academic subjects, or along vocational lines to suit the occupational life of the pupil. Attendance at these continuation schools has been compulsory for about seventy years. Originally they were held Sundays and evenings. More recently they are held weekdays.

Thru the initiative of Dr. George Kerschensteiner, superintendent of schools of the city of Munich, who reorganized the continuation schools of Munich upon a new pedagogic basis, with shopwork as the center of the boys' activity, the idea of shop-instruction in addition to the former technical instruction, is gaining ground.

There is a variety of industrial and technical schools—state schools, municipal schools, and private schools. Taking them as a whole, there are industrial schools, lower technical schools, middle technical schools, special technical trade schools, and technical high schools.

The industrial schools are chiefly continuation schools, compelling the employer to send his employees under eighteen years of age to these schools on weekdays, from four to eight hours.

The vocational schools for girls are day and Sunday schools, in which cooking, sewing, and the various household duties are taught.

The schools of industrial arts and trades are evening schools with instruction in subjects pertaining to specified trades.

The schools for the building trades include all occupations concerned with highways, street railways, bridges, sewers, etc.

Schools for metal workers and textile industry are day schools of a higher grade than the continuation schools. They are called secondary vocational schools. The lower and middle technical schools prepare for foremanships and similar positions, but are not preparatory schools for engineering colleges. Instruction in the continuation schools includes not only subjects pertaining directly to the trade of the pupil, but also business practice, bookkeeping, estimates, civics, law as it effects industrial life and industry, physics, and materials of construction.

AUSTRIA

Industrial education in Austria had its beginning in the middle of the eighteenth century with the establishment of an industrial drawing school in Vienna. There is a well-organized system of continuation schools, trade and lower technical schools, and also industrial art schools.

Manual training forming part of the regular curriculum of the elementary schools in Austria, it helps to make the continuation schools more effective.

SWEDEN

It is well known that sloyd instruction has formed part of the curriculum of the elementary schools of Sweden for the past forty years. It is taught to children of from ten to fourteen years of age. In order to adapt manual training to the age of the pupils, sloyd has received more attention in Sweden than other forms of manual training altho metalwork and other forms are also taught.

BELGIUM

Belgium has a very efficient system of industrial education, similar in nature to the one France has at the present time.

RUSSIA

For many years Russia has paid much attention to higher technical education and the results of her industrial education for workingmen attracted the attention of educators at the Centennial Exposition in 1876 and resulted in the introduction of manual training in this country. Since then Russia has extended that system of industrial education in various directions.

ITALY

Italy also is beginning to feel the need of such training for her mechanics.

THE NEW STANDARDS

After this cursory review of present industrial education in Europe, we are prepared to inquire in how far changes from older methods to new ones have produced new standards in methods of teaching as well as in organization.

During recent years economic forces have operated to bring about keener competition between all industrial nations. This economic pressure brought to the attention of the industrial communities the weak points in the methods and organization of their industrial schools. It was realized that industrial education was as important a civilizing and socializing educational force as the old, traditional cultural education. Moreover, it was seen that if any system of industrial education was to be effective, it had to include in its scope all of the industrial population. To make such an extensive scheme successful requires state aid and the authority of the state to carry out the provisions of the organization.

Hence we have as a new standard in the present system of industrial education in Europe, a growing power of the state over the organization of such schools, the extension of the compulsory feature of attendance of industrial schools, for all pupils under eighteen years of age and a vast increase of expenditures by the state and the municipalities over former years, for the education of the masses of industrial workers.

While compulsory attendance at industrial schools has thus far found no favor in England, yet from the social standpoint, new standards are attained by the encouragement given to the young people to make use of what increasing facilities there are in the shape of industrial and technical education in day and evening schools.

Scotland has materially contributed to the establishment of a new social and educational standard by the legalizing of a compulsory attendance act whereby those having charge of young people are made responsible for their attendance.

While primary education in France is compulsory and there is a favorable sentiment among the people to have attendance at industrial schools likewise compulsory, no standard has as yet been set by law in this direction in France as in other countries. Nevertheless, since all power over the schools is concentrated in the hands of the minister of public instruction, compulsory attendance may soon be expected.

In Switzerland new standards have been established in the direction of increasing the number of industrial schools and making them more effective by giving the federal government the power to subsidize these schools to the extent of one-half of their expenditure and by giving the cantons the right to make these schools compulsory.

The same tendency toward new standards of social usefulness of industrial schools by invoking the power of society and government is observable in all other countries of Europe.

When we come to examine into the purely pedagogical changes which have taken place in the European industrial schools during recent years, we find a radical departure from what was formerly considered the standard of efficiency. The old-time elementary subjects were raised to a higher level, courses were differentiated, manual training was established, technical and scientific subjects were added and a beginning was made to pay as much attention to the training of the man and citizen as to the training of the mechanic. The state, being the conservator as well as the promoter of the material welfare of the people, stepped in with its concentrated authority and financial power, and advised the character of the organization and the curriculum of the industrial schools. However, considerable freedom was allowed the municipalities to suit local conditions or progressive tendencies. In the consideration, then, of the economic changes taking place successively in the industrial countries of Europe, we find the key to the difference in the rate of progress in the establishment of standards of efficiency in industrial education as well as in the character and variety of schools found in different countries. In those countries with meager natural resources, as for instance in Germany, we find not only the rate of progress rapid but also a great variety of schools and a highly technical curriculum to make up for scarcity of natural resources.

With the entering, during recent years, of all industrial nations into world-wide competition, a new factor, the commercial economic factor, has entered the educational field and has compelled the raising of European standards of industrial and technical education to a still higher degree by the introduction of commercial subjects in the continuation schools. In conformity with this new, pressing, economic force, menacing these nations who are involved in the struggle for industrial existence, the new standards of present-day education in Europe present the following aspect:

First.—A system of industrial schools intended to reach the whole mass of the population, but so organized as to leave room to escape upward for those who are destined and able to go higher.

Second.—A growing tendency to introduce manual training and technical subjects into the elementary schools.

Third.—A system of trade and continuation schools.

The most advanced system of industrial continuation schools, offering new standards of a high order, are those at the city of Munich, Bavaria. The older form of industrial continuation schools aimed to supplement the practical shopwork of the apprentice boy with such technical and theoretical knowledge as was not obtainable in the shop, but the various subjects were not well correlated and therefore not very effective. No shopwork was done in the continuation school of the older type.

Dr. Kerschensteiner, in reorganizing the continuation schools of Munich, changed the traditional form by not only introducing shopwork, but by making shopwork the center of interest in the furtherance of industrial and social activity. To accomplish this he co-ordinated and correlated technical and scientific principles, civic instruction, and moral teaching with the practical shopwork in such a way as to make the schoolshop the center of industrial activity and at the same time a social force to assist and strengthen the intellectual, moral, civic, commercial, and industrial activities of the state and thereby prepare the ground for the creation of favorable opportunities for the individual citizen. According to Dr. Kerschensteiner's ideal and pedagogic conception in the modern continuation school, mechanical skill, economic insight, civic consciousness, and a sense of moral responsibility are to be welded into a homogeneous educational principle to produce not only skilled mechanics but also responsible citizens and intelligent men of character.

Austria, Sweden, Switzerland, Belgium, England, and Scotland are adopting these ideas and ideals and thus new educational and social standards are being established.

RECAPITULATION

On final analysis of the present-day organization, tendencies, aims, and equipment of industrial education in European countries, we find the new standards aiming for mechanical skill, technical and scientific knowledge, insight into economic principles, character building, civic efficiency, and a development of a sense of personal duty and obligation not only to oneself but to the community. In order to make the development of such a far-reaching educational program possible, there have been made radical changes in the traditional educational system by additions, differentiations, and alterations of organization and curriculums.

New ideas about the cultural, the economic, and the social value of industrial education upon a broad, socializing basis have become standards and the basis of ideals which perceive in the broad industrial education of

the masses a new social force, not only economically beneficial to the industries, but primarily useful to the state as a civilizing, conservative agency to conserve the mental and moral resources inherent in the people for the best uses of the state itself in the formation of citizenship and civic duty. For in European countries the man as a civic unit to strengthen the machinery of the state receives first consideration and everything is subordinated to that primary aim.

In order to maintain these standards and to carry out such a program there is available a high standard of patriotic self-sacrifice which is willing to appropriate enormous sums for these industrial schools; a remarkable co-operative spirit pervading all classes of society when it comes to the question of industrial education for the people; and a democracy in the application of educational endeavors which secures and vouchsafes the possibly widest distribution and deepest penetration thruout the whole mass of industrial workers of industrial intelligence, economic insight, the conception of civic obligation and ethical principles.

In 1909 there were 1,719 industrial continuation schools and 381 commercial continuation schools in Prussia with a total of 360,000 pupils and an expenditure by the state of 11 million Mark, or 30 Mark per pupil. In addition the municipalities contributed some 2 million Mark and all the school buildings with their necessary equipment. In Munich the cost per pupil in the common schools is $25 and in the industrial schools $21 per pupil or $46 per pupil up to the age of 18 years.

Are these new standards applicable in any form to our own industrial, economic, and social conditions? Are we prepared to make our coming industrial schools as democratic, as diffusive and varied in form, as suitable to local conditions and individual requirements, as are the industrial schools of our European friends and competitors?

DISCUSSION

Louis C. Butler, San José, Cal.—When out of six papers to be presented before the distinctive manual-training audiences of this Convention, three refer directly to industrial or vocational topics, it shows conclusively the present direction of the schoolman's interest in this subject.

As the wise man builds upon the successes or failure of those preceding him in his work, so it is eminently proper that we should turn in this new departure to those countries which, however different their conditions and ultimate requirements, have worked and are working today on this same problem.

We have heard, today, a masterly presentation of the industrial system of education as developed in Europe and a careful analysis of the new standards developed thereby. Mr. Kreuzpointner has given us this in outline from nine countries, and from the report I gather that in no country as a whole complete success has crowned the prevailing system; that some system of compulsory attendance seems to be required; and that a considerable financial outlay is rendered necessary—all of which tends directly toward state regulation and control with strongly assisting legislation required. Mr. Kreuzpointner finds in Munich the only system that seems to be big with promise of success, educational, professional, and social; and here it is that of the continuation schools reorganized by one

master-mind with the entire scheme revolving around the shop as the school center. Standards of European success in this matter, then, seem to mean state control, helpful legislation, and new organization of school systems.

In this convention we represent, possibly, the greater part of the manual-training work carried on in the United States and from us, directly or indirectly, goes out the inspiration that guides tens of thousands of eager boys in their shopwork—a work that we all wish to make more fruitful of good to the individual, more direct of gain to the community. Not all of us can influence or direct legislation; few of us can ever hope to organize or reorganize school systems—save in private; not many of us are fit, maybe to carry on that work that will require a teacher who can work and a worker who can teach; but the one thing we all can do is that which *must* precede those larger tasks: we can make the employer, the legislator, the laboring-man, the schoolman, even the schoolboy respect industrial education as a serious undertaking of economic necessity, not a mere pedagogic fad.

If you require strong central control, compulsory legislation, and increased expenditure of public funds you must base your hope of success upon public confidence and sentiment; especially, in this case, that of the whole gamut of industrial interests from laboring-man to the big employer. The former must, as an individual and as a part of the powerful labor interest, feel that the matter is one that affects his boy or his trade in a direct, serious manner. He must respect the idea as a whole and the practical details of its working. The latter must also have equally great confidence in the integrity of the work and those carrying it on, for surely his hearty and active co-operation will prove essential.

In other words, this outline of European endeavor should show conclusively that industrial training must mean to us all a serious departure in educational procedure, a wholly new step in organization, instruction requirements, and resultant values. It is not an offshoot from or a development or adaptation of our present manual-training departments; it is an economic necessity faced clearly and met cleanly by the wisest and best of our educators.

So let us oppose as best we may the loose use of this word "industrial" in its all too frequent application to the regular shopwork, to the playing at or with a few technical processes that we find in some of our shops, to the efforts of some of our greatly learned but far from technical men.

All construction work is industrial from one point of view but these experimental happenings often serve to confuse the lay mind and may bring discredit upon genuinely serious work. Acquaint our youngsters with industrial facts and let them work in representation of some detailed process, by all means; but do not call it "industrial training." Men who labor and employ labor will not agree with you—and they are the men who must be considered now.

The new European standard is one of facing a momentous economic problem with true appreciation of its gravity and dignity; may we as a body stand for a similar attitude toward that work among ourselves, a work that must be developed by the sanest thinkers, the most practical workers, the strongest teachers that our profession can produce.

THE REQUISITES FOR THE EFFECTIVE TEACHING OF THE MANUAL AND HOUSEHOLD ARTS

HELEN LOUISE JOHNSON, WATERTOWN, N.Y.

The chief requisite for the effective teaching of the manual and household arts is the teacher. There is no question concerning this. All agree that the place, equipment, school board, even the mental caliber of the student,

count as nothing when balanced against the influence of the teacher. Therefore what anyone considers the chief requisites for the effective teaching of the manual and household arts will be found in what he asks of the teacher. The failures will be found to go back primarily to the teacher. The development of this educational ideal has been, is, in the hands of the teacher.

All this is true, but the situation requires a brief analysis. There is a close analogy between the responsibility laid upon the teacher and that given to the mother. The parents are responsible for the behavior, the conduct, the future lives of their children; but if they have lacked in that previous training, education, and opportunity which makes the good parent, then their parents were responsible, and we find ourselves entangled in an endless chain, leading back to the father of all those who earn their bread by the sweat of their brow.

So it is with this teacher whose qualifications to so large an extent must be modified by the kind of training received, and the influences exerted by those who are teaching and training her. What then are the essential qualifications which the teacher of the manual and household arts needs to acquire and possess in order that his or her teaching may be effective? And how may these be given?

Of late years some authoritative books on education have appeared which state definitely what characteristics a teacher should possess, what essential qualifications evince, if he is to be successful. Of these I quote two: In his chapter on "The Ideal Teacher" (*The Teacher*, Palmer), Professor Palmer says:

> I believe there are four fundamental characteristics every teacher must possess: first, an aptitude for vicariousness; second, an already accumulated wealth; third, an ability to invigorate life thru knowledge; and fourth, a readiness to be forgotten.

In Horne's *Psychological Principles of Education* he quotes Dr. Arnold's familiar saying that the qualifications he looked for in teachers were character, tact, and scholarship. Mr. Horne himself states four indispensable qualifications namely:

> a knowledge of the subject taught, a knowledge of the pupils taught, the ability to teach, and a worthy character.

It would seem that both Mr. Horne's and Mr. Palmer's qualifications might be embraced entirely in the one both have indicated and one has mentioned as merely one of the desirable essentials in successful teaching; that is, the ability to teach. Discuss its psychology or its philosophy as you will, the whole matter lies right there in the ability to teach. We feel that this is not possible without some of the mentioned characteristics; and we know that to teach the truth demands character, but "if he speak with the tongue of men and of angels and have not charity, it profiteth him nothing." If he have the knowledge of the universe and cannot

stimulate the latent powers of the student to interest, what difference can wealth, vicariousness, character, make?

Each one of us has said or thought "I might have done thus or so had I been properly taught." We all have vivid memories of schooldays in which certain subjects stand out because of the teachers. Think back to your own schooling. The teacher of science in a high school I attended was so limited in the knowledge of the subjects he taught that he was unable to perform or explain experiments, but he succeeded in awakening in his pupils a desire to know, infinitely better than the facts he might have imparted. His limitations were worth much more to the students than the extensive knowledge possessed by a teacher of mathematics in another school, whose pupils just managed to scramble thru her examinations by means of immediate and most vigorous cramming. I lay my lack in these respects at her door, for geometry as taught by her represented lines on a blackboard, to which certain, always certain, to-be-memorized letters of the alphabet were attached. I even supposed solid geometry was so named because it was harder than plane, until years later when in visiting a kindergarten I realized the babies were learning what I had never grasped. That teacher had wide and varied knowledge, her character was most exemplary, but none of us learned from or of her. Yet in that same school the man who taught physics was a scalawag, but he inspired each of us with a desire to learn. He even taught what the teacher of mathematics failed to teach, for he took us out into the open and made us lay out our own tennis courts by means of a well-known problem beginning "the square of the hypothenuse of the right-angled triangle is equal to the sum of the squares of the other two sides."

Knowledge, no; character, unfortunately, no; wealth, never; but ability to teach, a most comprehensive term: on this and this alone rests the success of the teacher. The three vital requisites in this are *interest, method,* and *a few facts.* These the teacher must possess for the effective teaching of any subject.

And my first quarrel with one of the prevailing modes of training the teachers of the manual and household arts is that they are too often separated from their fellow-students by artificial boundaries, and in place of receiving the general training in teaching are taught to teach the manual and household arts, as if these were things in themselves, something outside the bounds of ordinary education. There are students of elementary and secondary teaching, then those of these special subjects. No wonder that when the teacher of the manual and household arts reaches the school of which she is to be a part, she finds herself an addition to, and not an integral part of, the main structure. Specialization should come after a certain and as large amount of general training has been received, as is possible in a given time.

Interest, method, and sufficient knowledge, but not too many facts—

these after all are the height and breadth and depth of education. The heart of the matter lies in our interpretation of these three dimensions.

Interest is an inclusive term. A close analysis of the teacher's or student's interest will reveal to us the motives which incite effort of any kind, the ideals or aims toward which effort is directed, and the conception of the value of the different means selected to attain those aims. We cannot intelligently discuss this requisite of effective teaching, unless we are willing to see it in a larger meaning than merely that natural bent or inclination of the mind to find satisfaction in a subject. I mean something as much greater than this as the teacher's mind and heart should be greater in order that any proper result in teaching may be attained.

Interest does not mean that collection of technical tricks by which the student is kept at work for the hour with his brain sufficiently stimulated to gain a glimmering of meaning from the task before him. Interest means that great and wonderful and comprehensive emotional as well as intellectual thing which makes a teacher believe in herself and in her work; leads her to see her subject as the greatest thing in the world, and infuses her being with an enthusiasm which keeps the soul from fainting even while the body aches with weariness and the heart and mind falter before the task. The interest of which I am speaking makes possible the immolation of self upon that altar of sacrifice without the agony of which no teacher ever really teaches. With such interest the teacher does not teach wood-carving, weaving, cooking, sewing, or household management, she teaches living, life in its fulness and joy.

Endued with such a fundamental requisite, the teacher is able to stimulate the students to feel, if not to see, something beyond the immediate task; to rouse lagging faculties to energetic action toward results which eventuate in thinking straight, and acting truly, and whether her pupils pass board examinations or not, she will have given an impulse, at least, to that inner process which means redemption.

When school boards, superintendents, and principals—one might add, presidents even—are appointed from those who have grasped the vital need of abandoning the external for the sake of the internal, then will the common demand be that these courses shall be practical, be right. The correlation between the doing which incites interest, and the thinking which educates, is the problem of the teacher. In the present moment must be taught those immediate things which will furnish real motives for further endeavor. This is impossible unless the teacher herself see the distant end as a complete reality. All thru life we see countless people mistaking the means for the end, and thus losing in the game of life. This above all else the teacher must not do, and here is where we may criticize those school boards and principals who are sacrificing the ultimate realization of the educative power of the manual and household arts to immediate returns. This is what is done again and again when it is demanded that such work be made practical.

Practical it always is when it accomplishes, but practical it will cease to be if its educative power is made subservient to its commercialism.

It is interest and interest alone which leads the teacher to that discipline of self, that unremitting effort, that welcoming of information which makes for effective teaching. It is not alone by sacrifice but by dreams also that we attain to power. Reich has told us that the four great objects of all success are Health, Love, Honor, Power. These desires are of the essence of man. To achieve them we move upon a line of strategy determined by a constant and a variable. The indispensable constant is education.

Therefore if she is to attain to power, the teacher must have education. And you will say to me before I have done, "You ask too much of the teacher. We who are training them are dealing with faulty human beings whose early training ofttimes has been deficient, whom we have for all too short a time before we must send them forth to teach." In reply I say: "I am asking only of each individual one that measure of perfection which she herself can attain. But I do ask of those who train teachers that they put before these boys and girls who are to be teachers the true ideal of education, which is not induction into conformity with the conventions and ideals of society; it is not, if Mr. O'Shea will forgive me, mere adjustment to civilization: it is, in its sense, passing thru these experiences into a realization of the soul and the meaning of life.

This can easily be made absurd. We all know kindergarten teachers who regard the babies they are teaching as little souls and neglect to look after their many-times naughty and always to-be-cared-for little bodies. We have all seen the development ideal carried to the extreme of nothingness, and the student left without even the rudder of one definite idea by which to guide himself. I mean no sickly sentimentality, but concisely this: that in the teaching of facts we can most easily fail to see the ultimate result of those facts; that effective teaching depends first and most largely upon a vision of the results of that lesson, series of lessons, all educative processes, sufficiently great to enthuse the teacher with the interest which leads to awakening interest in the student; and that it is our duty as teachers training teachers to give this definitely—withal as wisely, as delicately, or tactfully as in us lies. It is first our duty to awaken in the raw material before us, the desire to attain unto a measure of perfection which keeps up the enthusiasm when the painful task of transmuting the dross of stupidity into the pure metal of awakening intelligence is presented to them.

The method by which this transmutation is accomplished is the second great requisite in effective teaching. And again I am not referring to that which educators have rightfully criticized and which many principals and superintendents dread. Cut-and-dried, lifeless methods where there is nothing else are as deadening as the lack of any is disastrous. I again mean something as much greater than this as the whole is greater than any of its parts.

As the interest of which I have spoken can only have its birth in ideals so the method which is required for effective teaching arises only in the developed imagination. Without the ability to put oneself in another's place, there is a constant effort to impart in place of inspiring knowledge. The sympathetic creation in our own consciousness of conditions which belong to those before us, the realization of perplexities, the appreciation of the unintelligibility of what we are trying to present, this is trying business. It requires that exquisite touch, that quick sensibility which Dr. Arnold called tact, but which is embraced in the real meaning of method. For method means nothing less than a way, a mode, a plan of arriving at a certain place which is the ideal, and nothing less than the ideal should suffice.

This greater method includes first a knowledge of the pupil, or the desire to seek for this, and second, an actual understood and used scientific method of instruction. For method is based on psychology, and a true knowledge of psychology leads to a best way of doing things. Method is not based merely on a knowledge of the subject. It is directly and specifically based on what are termed formal steps in teaching.

And my direct criticism of much of the teaching of the manual and household arts in certain places would be that the teachers, while having knowledge of their subject, utterly fail in their method. This is due to several things: first a lack of uniform demand in the training of teachers in these subjects: second, a seemingly popular idea that if one knows something of a subject he or she can teach it, therefore a sending out of teachers direct from high school and college with so meager a training in the thing in hand they might better be without any, for here, as everywhere, "a little knowledge is a dangerous thing"; and third, a mistaken idea that special method is required for special subjects rather than a full, good training in general method.

One of the best-known normal principals in the East, a man whose graduates are eagerly sought, has said again and again: "I would rather have a teacher with four facts and a working knowledge of method, than one with four hundred facts and no method." In this we all probably agree, but the disagreement seems to come in the kind of method required. It is peculiarly true of the students of the manual and household arts that they are given methods of teaching domestic science, methods of teaching wood-carving or sloyd, and not method. When the teachers of these subjects are required to study the educational methods of Froebel, when their work is based on an understanding of his psychology and his philosophy, when in other words, they are given an authoritative foundation for the superstructure they are building, then a great weakness in the training of some of these teachers will be overcome. The time is here when students of the manual and household arts should take some courses in kindergarten training, and students of kindergarten work should take certain courses

in home economics. We are working too far apart in a place where the correlation and similarity of needs are plainly obvious.

Some few years ago the well-known governor of one of our great states said that he based his success entirely on the fact that he was trained in a normal school where he learned method. He said:

> All men who desire to be successful should study method, not methods of business, those are based on psychological methods, but the methods by which we are trained to teach; and my boys shall go to normal school, either in place of, or as well as college, in order that they may acquire that key to successful dealing with men, called method.

The teacher of the subjects under discussion if she know general method, can work out her own special methods, and indeed to a large extent she will have to do so anyway, for special methods mean nothing more than the adaptation to the requirements or needs of that particular pupil or place. A proper training in method should give the teacher the ability to adapt herself and her plans, her equipment and her teaching to the direct needs of the students before her. And it is again here that a criticism can be made of some of the present-day tendencies in the preparation of teachers.

We teach these students that the child must be left and led to create, not taught to imitate, and then we limit the creativeness of the teacher by over-equipment. We stultify the intelligence of the young teachers by giving them facts and no great underlying basis from which to reason, and by which to use the facts to the end of inspiring a passion to know.

Comparatively few facts are needed, but much knowledge. Facts as mere facts are as useless as money hidden in a stocking. There is altogether too much teaching of facts at the expense of that needed intelligence which is gained thru familiarity with educative processes. But the weakness is not alone here. The purpose of all education is the apprehending and understanding of truth and its application to life. Until one has seen truth in its beauty and possessed it in its entirety, his complete development has not been reached. We are not asking for complete development, even in the teacher, but we must ask for that education and training which enables the teacher to grasp and later teach facts in their relation to the whole. This is why I emphasize a few, not too many facts, and I desire to make myself quite plain on this point.

The history of the science of agriculture as taught in our agricultural colleges is analogous to that under discussion today. At first the subjects were taught almost wholly on a practical basis, with little regard to pedagogical formulation. The teacher gave instruction in the use of tools, in certain processes, but in little more. As there came a more definite formulation of courses and divisions of these in accordance with the several branches of science in which they were applied, first specialization appeared, then a change in the relation of other subjects to the scheme of instruction. In other words first cooking was taught, then chemistry as applied to cooking, then physics crept in, until a whole course of study had grown up, and

later was reorganized into the definite grouping of the household arts with its natural divisions and specializations. And what now happens? Where is the weakness?

It lies in too many isolated, unrelated facts, too little of seeing the whole. Have you not seen students preparing to be teachers who have learned the physics, the chemistry, the bacteriology of milk, and ceased to appreciate milk as milk, as a whole? In fact they never approach it from this standpoint. Have you not had occasion to plead with some obdurate professor that you did not desire these courses in botany and zoölogy, but wished these home-economic Freshmen inducted into what, in your crass ignorance, you termed "general biology"? You have almost tearfully explained that you wanted the students to see the science of life as a whole of which certain parts were to be studied and analyzed because of their relation to the work before them, but you were sent about your business to teach your own subject and told that you did not know what you were talking about, that of course your students must learn these facts in botany and zoölogy.

In brief, textbook facts are not enough. It is knowledge of how to use those facts and what they mean in the general scheme of life that is needed. The highest intellectual development is evidenced by simplicity, and progress toward a higher standard of education is always shown by simplification. What is most needed today in the training of the teachers of the manual and household arts is this thing: a simplification of equipment, of certain courses of study, always done, however, with the ideal result held before our eyes. The content of these subjects has grown from a small collection of mere facts and simple processes to the embracing of all science and much more of literature, of history, of arts, and that most difficult of all knowledge, of the world and of men, of social, and industrial, and economic progress. Some of all this the teacher must know, but not as isolated facts.

The only permanent influences in the growth of the educational practice and theory are those which are based on the natural development of man. Munroe says, "A natural education is one in which the subject taught is secondary to the manner of teaching; in which the task done is subsidiary to the effect of doing it; in which the question to be asked at the completion of an educational step is not, What has the child learned? but What has the child become?" Knowledge after all is but the perception of relations, and this must the teacher have if she is to lead the student to the place where he can see even the relation of two and two to four. All that I have desired to say is in that one sentence, for when the teacher has apprehended detached facts and brought them into orderly relation, she then must have acquired that knowledge of results and a method of attaining them which is the basis of effective teaching.

If we analyze the factors which have made the great teachers, we find

certain things which are embraced in the three requisites of effective teaching: first, a consciousness of a mission; second, a desire to accomplish; third, a consecration to an ideal; and fourth, that sympathy without which psychological insight is impossible. The final task of the teacher is to create atmosphere and this the ideal teacher accomplishes. But what are we to do with this material given us out of which we are to mold teachers, and in which we, not being Michelangelos, do not perceive the angel?

We are first to endeavor to be or become that which we preach. Professor Griggs has said, "We can teach more than we are, but not more than we try to be." We can have the courage to say, "You have made a vital mistake. You can make a most excellent cook or possible carpenter, a good lunchroom manager, there are many things you can do well, but you cannot teach." We have too many half-educated teachers who are learning by doing in the wrong place. Normal schools at present stand between the Scylla of the high school and the Charybdis of the college. They require high-school preparation, but are too greatly isolated from the higher subject-matter of the college. Their function is to train in how to teach, to give the ability to perform this task. The college teaches what to teach, and its general attitude of contempt for the normal school and methods shows weakness and not breadth of vision. The length of time given to the acquiring of subject-matter should be lengthened and at least two years of college work asked before two years are devoted to normal methods. I know the arguments against this. I am not here to answer them. I am stating simply what I believe to be the requisites in preparing for the effective teaching of the manual and household arts. I believe courses in training must be lengthened. I believe specialization must be further made but without the weakness and waste of isolation. One of the great lessons all teachers must learn and more especially those who are teaching special subjects is the unity of education. There can be no breaks, no gaps, no untaken steps, and gaps there are if any subjects are taught as isolated, or separated, or divided from the whole.

The old Greek legends tell us that the giant with whom Hercules struggled was invincible so long as his feet were on the solid ground. I would not have you feel that the three requisites, interest, method, and the few facts, are visionary, idealistic things. Nothing is more needed in the building of courses or the training of teachers than sane common-sense, but that same common-sense must be enthused with the ideal, infused with the power of imagination, or we cannot keep our feet firmly planted on the earth. You will remember that Osborn gave seven factors in education, the seven lamps by which we are guided to success: pure intelligence, entire efficiency, sinless morality, all truth, immaterial beauty, errorless wisdom, perfect health. These in their wholeness are unattainable by any man. These indeed crown the summit of that Delectable Mountain for which

we strive. But unless thru true interest, which is desire, we keep such visions before us, we must fail in the learning, the doing, the conduct, the truth-seeking, the love of beauty, and the search for wisdom which are the steps by which we climb.

SOME PRESENT PROBLEMS IN THE LITERATURE OF THE MANUAL ARTS AND VOCATIONAL EDUCATION

ALFRED GUILLOU, BERKELEY, CAL.

The detailed problems of current literature (and largely of current practice also) seem to me to be aspects of one more general and wider problem that may be stated thus: The vocational idea can be viewed from two standpoints, which differ from each other so markedly that more than one disagreement and many of our misunderstandings and confusions must be ascribed to this difference of view.

One standpoint is that of feeling, earnestness, enthusiasm—what is really best described by that overworked word, interest. This may be expressed by saying that the more any subject contains of the vocational element, the more interesting will that subject be and the more apt to enlist the enthusiasms of the pupils.

This may be called the subjective or apperceptive aspect of the vocational idea. It involves the element of imitation in its broad sense, as used by Tarde and Baldwin, imitation of feeling, imitation of ideas, imitation of ends. It is a modified form of what we call social influence, and it runs thru the book subjects quite as much as the mechanical subjects.

We honor this emotional or apperceptive standpoint of the vocational whenever we combine elementary surveying with trigonometry, when our geometry is based upon or makes frequent reference to those space relations which are employed in the everyday work of the carpenter, the mechanic, and the machinist. It is the almost complete absence of this vocational element which makes algebra a subject of such relative difficulty. The broadening of history, whereby it adds to political facts the social and industrial life of past ages, is another aspect of the power of this vocational standpoint to create enthusiasm and establish interest. All this holds quite as fully in the manual arts: we can teach them abstractly and theoretically, or we can inject into them the leaven of the vocational that will penetrate the whole work and give it an interest and a vitality to be secured in no other way.

Nevertheless, from this standpoint, let us call it the apperceptive standpoint, the object or purpose educationally is not a specific training for a lifework, but a general development of power and skill, physical and mental, that shall be available in any line that may be afterward selected as a specialty. The vocational element is used as a means, it is not an

end in itself; we use it because we find that by it we secure those vigorous reactions which are essential to growth in power of any kind.

The other standpoint as to the vocational we may call the specialty or life-calling standpoint; we may introduce vocational elements because those are the facts and those are the methods that the pupil will need in after life when he follows that subject as his lifework. When we teach drawing, we can assume the standpoint of preparing for a life-calling, and introduce the technique and methods of the studio. The workshop may aim specifically to prepare the boys for carpentering or the cabinet-maker's trade. Very much of our commercial high-school work is along this specialty or life-calling line. All this we may do, not because it adds zest and creates earnestness, but because these things are the rudiments of the future calling, and they must be learned early and thoroly, to be available in later life.

At first sight from a broad and more or less general view these two standpoints do not seem contradictory. We ought to secure the emotional element of interest and earnestness when we make preparation for particular callings the purpose of our work; and, on the other hand, by using the vocational for its interest and enthusiasm, we are to that extent fitting pupils for the special vocations emphasized. When, however, one engages in teaching and encounters the various concrete problems which arise in such work, this general harmony disappears rapidly and the conviction is soon forced on one that these two standpoints as to the vocational clash with a wearisome repetition.

Consider, in some detail, the question of technique from these two standpoints. From the apperceptive side, the purpose of technique is to facilitate expression; it is the fundamental means by which are developed discrimination, judgment, and those chains of association called useful; it is in short the vehicle or means of mental and emotional growth. But from the trade or specialty standpoint technique is an end in itself; it must be perfected to the highest possible degree both as to speed and as to accuracy. This requires repeated practice until the operation becomes more or less automatic. The artist in embryo devotes to the fundamental technical processes of his future vocation, weeks and months of wearying labor that could be supported only by a zealot. The apprentice of the cabinet-maker spends his first month or more in the one process of ripping, and at the end of three months he can rip lumber as accurately as a buzz-saw. At how much of this automatic quality shall we aim in our school work? We are woefully limited in time, the curriculum is crowded; except in a distinctly trade school we cannot gracefully or reasonably ask for more than one-fourth of the roster, which, if granted, gives us just $31\frac{1}{4}$ working-days of eight hours in a year. This time manifestly is inadequate to the accomplishment of both purposes. How far shall we sacrifice opportunity for real expression to the process of acquiring automatic

technique; and, on the other hand, what shortcomings in technique shall be condoned in order to secure real self-expression?

This much time has been occupied in the somewhat full elaboration of the two standpoints as to vocational work, because it is believed that one of the weakest points in nearly all our present literature is the fact that the writers have not aligned themselves clearly and distinctly with either one standpoint or the other, and, in consequence, their treatment of their subjects is neither "fish, flesh, nor good, red herring."

This vacillating attitude appears more clearly from a consideration of some of the more prominent details involved.

Thus, in the knowledge and care of hand tools shall we emphasize the grinding and honing of edged tools and the filing of saws to the extent that the pupil may do such work satisfactorily to a mechanic; in tempering at the forges shall we aim at reliable tempering or simply at giving the boy an idea of colors and methods? Shall we lay emphasis on accurate handwork, or shall we follow the shops and use machinery to eliminate the personal equation and to save time?

Or consider the methods with machinery: How far shall it be used as a substitute for handwork? Shall we regard the risk of personal injury to the pupil as an element of the subject to be taught—a perfectly proper attitude from the trade standpoint—or shall we, as do some schools, have the instructors run the machines? How far shall we go in the theory of the machine, using old-fashioned belted, open-geared lathes, or shall we have enclosed-gear, motor-driven lathes, in which the manufacturer has done the thinking and the schoolboy simply works a switch and a labeled handle?

A tool deserving particular mention here is the steel square. Its invention and development may justly be regarded as a conspicuous evidence of the braininess of the American mechanic. Next to his hammer and saw, it is the most useful tool in the carpenter's kit and, on the other hand, many of its possible "cuts" involve quite elaborate, co-ordinate solid geometry. Comparatively few schools use it at all, except as a square; and if we do use it, shall we give our attention chiefly to its theory or chiefly to deftness in handling it?

A fifth concrete illustration of this vacillating attitude of the books is the choice and treatment of material, the raw material of manufacture, wood, leather, copper, iron, and the like. The life-calling standpoint is concerned only with the relative cost of raw materials; their actual cost is an element of the price of the finished manufacture, and so a relatively poor man buys expensive material because the outlay will be refunded when he sells the article. The books and manuals ignore this fact with a nonchalance that is particularly exasperating to one who has struggled with the pitiful allowances of material that exist in the schools, or with no allowance at all. Consult Rouillon's *Economics of Manual Training* and

you will see cities that spend twenty cents a year per pupil, thirty cents, forty cents; a dollar and a half is luxury. And yet not 10 per cent of the projects of the manuals involve articles one of which could be manufactured with a whole year's allowance of material. Many of the tables, cabinets, and the like run up into three or four dollars apiece simply for the rough stock. Yet with this trade attitude toward material, such books treat the workmanship, especially in leather and copper, from a distinctly amateur standpoint. The whole subject is apparently regarded as a "hobby" rather than as a real business.

Pottery may be regarded as an industry or as a fine art; of course it always involves or should involve both, but one or the other must be the consistently controlling factor and the books vacillate constantly between the two.

Possibly the drawing work brings out most sharply the contrast between these two standpoints. In terms of method we might call the former the industrial method, the latter the studio method. Prang, in the high-school book, meets the issue squarely; "To teach art is more important than to teach drawing." This is one of the few books that consistently pursue a clearly defined principle. We find the same variance in mechanical drawing. On the one hand, the elements of draughting, descriptive geometry, technique, the use of the instruments, etc.; and on the other, working-drawings, the constructive, expressive attitude.

In the realm of method, as distinguished from tools and materials, we find this same inconsistency of standpoint. While the trade attitude does not ignore personality, it, of necessity, lays its first emphasis on the mechanical; perfection of technique, drill in form is first, substance comes much later. The relation of penmanship to composition expresses this fact exactly. We may thus class under the trade standpoint the common method of furnishing designs and working-drawings complete, just as the shop gives the workman a blue-print that he reproduces in the material. Early initiative is not only not encouraged, it is inconsistent with this method; discrimination, judgment, and thought are suppressed, and imitation of the outward form is made emphatic.

This whole attitude is consistent and proper from the life-calling standpoint, but it is woefully lacking in the development of what Dr. Sisson calls "emotional warmth and volitional power"; it is without that richness of association and that element of self-expression which are essential in the development of character and personality. This un-Froebelian attitude in the manual arts comes out strikingly in the separation of design and construction. Even when the pupil is not supplied by the book with the drawings of a complete project, which he simply copies, very, very rarely is any attempt made to supply design suggestions and constructive suggestions in such a way that the pupil will think the two together. Abstract designs are given, imitative constructions are given, but one of the

unsolved problems is the method of training a pupil to design while holding clearly in mind sound construction. The inconsistency of the books lies in the fact that while they so largely favor the trade method of a division of labor, so to speak, they fail very largely to give the minutiæ and technical details essential to any success in this method. In penmanship, for instance, every detail has been worked out thoroly—paper, pen, ink, holding the pen, direction of motion, form and proportions of letters, and so on—the technical attitude in the manual arts requires like treatment before it can be really successful; and to secure this end the first step is to make clear and sharp the difference between the two aims or standpoints, that we may not excuse or be blinded to the deficiencies of our technical or life-calling methods by shifting over to the standpoint of appreciation and general training. For to do continuous, progressive work that will result satisfactorily it is necessary to adopt either one or the other of these two standpoints and follow it with reasonable consistency.

The problems, then, which seem to me most unsatisfactorily treated by the present literature are:

First, the extent to which we should particularize in the knowledge and care of hand tools. In this I suggest the details of saw sharpening as a test.

Second, the same question as to both wood-working and iron-working machinery. In this I would make a knowledge of the minutiæ of pulley and gear motions a test.

Third, the question of material. This is the world-old problem of cutting the coat to fit the cloth. There is a woeful lack of designs and constructions that can be followed with the material actually supplied in the average school. There must be a fuller recognition of actual conditions, and far less of a setting forth of unattainable ideals.

Finally, there is the problem of encouraging initiative in the combining of design and construction—not necessarily artistic design—but a training in the ability to analyze a want or an idea, to locate it spacially, and then surround it with appropriate material of wood or metal, well joined, well braced, and well spaced.

THE PUBLIC-SCHOOL DOMESTIC-SCIENCE DEPARTMENT AS AN INFLUENCE IN THE COMMUNITY FOR ENFORCING PURE-FOOD LAWS AND CIVIC CLEANLINESS

MATIE P. CLARK, HEAD OF DEPARTMENT OF DOMESTIC SCIENCE, MANUAL TRAINING AND COMMERCIAL HIGH SCHOOL, OAKLAND, CAL.

Social service is a tremendous force in our new education. More and more the boys and girls of today are having impressed upon them their responsibility for their neighbors. They must do their share toward the health, comfort, and happiness of those who are not only neighbors but

also of the whole community. As our honored Mrs. Ellen H. Richards said:

> Social improvement means cleaner streets, more inspection of markets, dairies, factories, and shops: in short more expense for community living but a simpler individual life. The cost of living must be considered a community problem.

One of the first laws taught the girl of our public schools is the law of supply and demand. It is the foundation of the commercial world. Commercialism quickly saw the opportunities in applying the factory system to home industries. It was not long before the housekeeper found herself face to face with the relative values of factory-made and home-made articles. At first the articles were of good quality, but soon competition became keen, and the greed for gain was an easy temptation to take advantage of the opportunity for adulteration. Before she was aware, the housekeeper became the prey of unscrupulous manufacturers who formed trusts, controlled the tariff, manipulated supply and demand, and increased the cost of living.

So the girl finds herself in a world of trusts that touch every phase of her daily life. Dr. Leffmann has said:

> A trust is a combination of persons who have obtained control of most of the means of production and selling of a certain article, who then proceed by reason of such control to limit the production, or make the community pay more for the articles than formerly and who divide the increased profit among themselves.

Here supply and demand are manipulated for selfish ends.

As a means of self-protection the girl is being taught the power of concerted, persistent demand. Where there is a demand there is always a supply created. And she is beginning to demand pure foods and sanitary surroundings.

That individual efforts count is shown in the work of one domestic-science teacher in Portland, Ore. She was asked to do something to improve the markets of that city.

> Thru the state health office, all back doors were opened. She went to the newspapers; she asked the woman's club to go on a tour of inspection. All this was brought about in three days. On the fourth day a meeting of householders was called. The Health Department gave official sanction to the movement. Market men were notified they must clean up. A clean list and a dirty list were to be made and they must comply with certain regulations in order to be on the clean list. She worked two months and the city once aroused decided it was a good thing to have inspection made. A woman now has the office and has power of arrest.

The work of Miss Jane Addams is well known. She asked to be appointed inspector in one of the wards in Chicago where the death-rate was highest. She gave special attention to garbage, and it was not long before that ward had the lowest death-rate in the city. One could have no better example of the relation of filth to disease, or the importance of efficient inspection which means enforcing the city regulations.

The woman's clubs all over the land have been taking an active part

in improving civic conditions and have brought about many radical reforms, especially where women have been appointed inspectors or placed in charge of the street-cleaning department, as in Denver and Chicago, for example.

Before the national Pure-Food and Drugs Act went into effect five years ago, a demand came from the people in general and the women in particular, for a pure-food law. They had the aggressive assistance of Dr. Harvey W. Wiley who made public the extent of food adulterations. Some states like Massachusetts, New York, and Indiana had most stringent pure-food laws, thus setting a precedent for the state laws and a standard for the national law.

While the national law is defective, it has placed a check on the most serious abuses, especially imported products and interstate commerce. It has not so much purified foods as it has exposed contents, adulterations, and preservatives used.

The public-school domestic-science departments have taken up this problem and are creating a demand for pure foods. Some schools buy foods in the open markets, test them for their purity, and place them on their white list or their black list. Sometimes they go farther and place stores on their white list or black list. In a certain city the dealers learned this and made an effort to get on the approved list, for they know the power of public opinion and the law of supply and demand. Naturally, this has resulted in students demanding goods of certain brands that fulfilled the requirements for purity. That unscrupulous manufacturers fear this investigation is shown by a specific case in the southern part of the state where they went to the city superintendent and requested that such investigations be discontinued in the high schools.

This is very different from the manufacturer who is willing to have his place inspected. A certain candy manufacturer will frankly tell you he is using glucose and artificial colorings in his candies and that his chocolate coatings are of many grades. He will also show in what ways he is complying with the pure-food laws in regard to gelatine, and grain alcohol, for instance. The girls in visiting such places learn to compare the value of factory-made and home-made products. They get new ideas of wholesale and retail cost, new ideas of the commercial value of cleanliness of production. After visiting an unsanitary bakery they have a new appreciation of bread made under clean conditions. They voluntarily advertise the clean place and condemn the dirty one. Honest manufacturers know this and those factories that are run under model conditions, like the Shredded Wheat Biscuit Co., the Franco-American Food Co., the Heinz Food Co., and The Taylor Canning Co., for instance, appreciate the value of the voluntary advertising. This is an indirect influence in the community that is being felt in enforcing pure-food laws and sanitary surroundings.

The public-school girl of today is informed on the city ordinances regard-

ing the sale and exposure of foods, and the sanitary regulations. She quietly investigates the grocery store, the butcher-shop, the bakery, the dairy or milk depot, patronized by her family. She makes reports in class and she is given moral backing in patronizing the clean place and black-listing the dirty place. Sometimes they use the boycott most effectively. But this is rare and they more often simply refuse to buy supplies exposed to flies and dirt. This is carried out in a certain country town in the southern part of the state where a small community makes it difficult to eliminate the personal equation. The work must be done diplomatically.

The girl of today has found that while the ordinances are good they are difficult to enforce for lack of enough inspectors because of the manner in which inspectors are paid. She realizes that public opinion and community interest, aggressive and persistent, must enforce these improvements.

Public-school children and the community as a whole found how much they could do in exterminating the rats and mice in San Francisco and the bay cities three years ago during the threatened epidemic. They learned that even the crumbs from their lunch boxes drew mice and flies to the school-yards and the buildings. They learned a most vivid lesson of individual responsibility for the health of the community and what systematic and intelligent co-operation could accomplish.

Another field that is open to large results is the war against flies. Not only girls but all the pupils of the schools are being taught the danger of the common housefly. The state inspector of Washington has just placed twenty thousand circulars in the hands of the school children of that state to assist in fighting and exterminating flies. This alone takes one to the first principles of civic sanitation—the destruction of all waste.

The high-school girl observes thru the microscope how the fly carries disease. She sees gelatine slides where a fly has walked across and the bacteria deposited by his feet. In a certain high school she has voluntarily cleaned the steps outside the domestic-science building when she found that the dirt there was drawing flies.

In California the domestic-science departments all over the state are agitating a clean milk supply. Whenever possible, visits are made to model dairies. When the girl learns the value of healthy cows, the importance of well-ventilated stables, the necessity of sterilized utensils, the necessity of absolute cleanliness of the men who do the milking, she realizes the importance of intelligence and training in the production of pure foods. She understands then why clean milk costs double that of ordinary milk. She also better appreciates the relation of milk to infant mortality and realizes it is a community problem. And it is impressed upon her that she must do her share in demanding more inspection of dairies and proper distributing centers.

The public school takes up home sanitation in great detail; for as

Mrs. Williams, supervisor of domestic science in the New York city schools, has said:

> Clean homes mean a clean city. There is a lot of science behind the proper care of the sink and the garbage pail, science that means much valuable aid to the municipal housekeepers, the board of health, and the street-cleaning department.

The importance of a well-constructed house, well-lighted and ventilated, and with proper plumbing, is emphasized as an essential requisite for a healthy family-life. A clean water supply and the disposal of waste present specific problems in both city and country town. The typhoid-fever epidemic, due to the careless handling of milk or a polluted water supply, shows the relation of home sanitation to the spreading of disease.

The relation of sanitation to public health is also a part of every high-school course in domestic science. It often works in connection with the women's civic's clubs where outward results are very marked.

The large cities offer more difficult problems with their congested districts, their bad buildings, poorly lighted and ventilated, with imperfect, limited water supply and neglect in disposal of waste. But even here are found improved conditions where the girls have come in touch with public-school domestic science. The physicians report better health conditions in the homes and the children come to school with cleaner clothes and cleaner bodies. Furthermore, they carry home much printed matter in their own language telling how to take care of milk, how and what to feed children, how to take care of them in hot weather, the importance of fresh air, and many other fundamental health laws. In New York City we find much interesting work of this character. Nearly all our large city schools are raising the standard of health among school children thru the lunchrooms. Here, only pure, wholesome foods are served. These lunchrooms are generally under the supervision of domestic-science teachers.

The public-school domestic-science department makes its classes familiar with the city ordinances on foods and also civic sanitation. While much is said on the cost of cartons and wrappings, there is an immense gain in the cleanliness of foods, especially when they are manufactured under sanitary conditions. A study of city ordinances tells them that fruits must be covered with nets or screened from flies and kept indoors as a protection from dust. Street venders of foods must keep their wares covered. The up-to-date market or grocery store has tile floors, sanitary walls, tile or marble counters. There are counter screens and glass receptacles instead of the old wooden kegs. On the streets the venders of confections, nuts, and popcorn must keep their products under glass. All of which goes to show the public are demanding civic cleanliness in regard to foods.

So, many industrial, economic, and social problems are involved in this subject of foods and civic cleanliness. One of the most difficult problems is to get offenders of the Pure-Food Laws punished. Some come under

the United States laws, some under the state laws, and others under city ordinances.

The State Board of Health in California publishes a list of the violators of the state laws. The district attorneys of the various counties conduct the prosecutions. When a single list contains the names of more than one hundred violators, the housekeeper realizes the inspecting body is active and vigilant.

Interstate commerce is pretty closely watched by the government inspectors. But investigations have shown that the punishment and fines have been very light or none at all. What is a fine of ten dollars to a manufacturer who is making thousands and thousands?

A more specific case is the investigation into the use of benzoate of soda in foods. The national law requires such investigations to be conducted by the Bureau of Chemistry at Washington. Dr. Harvey W. Wiley took hold of the work with characteristic thoroness with the final decision that benzoate of soda was injurious to health. The manufacturers protested and demanded that a special commission be appointed to investigate further. The commission was appointed by President Roosevelt. After a very superficial investigation they reversed Dr. Wiley's decision. When these conditions exist, the consumer thinks government regulation something of a farce.

So the public-school domestic-science department is endeavoring to create a public demand for pure foods, thru intelligent instruction of the girls who in turn influence the homes. Such united efforts all over the country are already showing results. But the real influence in the community will be felt when the girl of today becomes the housekeeper of tomorrow; when she will use to her fullest power the law of supply and demand in pure foods and sanitary surroundings.

SOME ACTUAL NEEDS FOR INTELLIGENT PURCHASING OF HOUSEHOLD COMMODITIES AND PRACTICAL METHODS OF KEEPING HOUSEHOLD ACCOUNTS

ETTA P. FLAGG, SUPERVISOR OF HOME ECONOMICS, LOS ANGELES, CAL.

Notice in this topic that we are to consider actual needs—not theoretical, possible, nominal, or potential, but genuine, real—what? Real needs—not impulses, wishes, or desires, but needs that must be met if life is even to approach what it ought to be. These needs are for what? Still more knowledge of higher mathematics, keener appreciation of art, truer love for poetry, broader grasp of current history, and all that this stands for? All these are desirable and are indeed to be coveted among the best gifts, but the actual need that is now manifest is for intelligent purchasing of our household supplies. Sometimes it is the man who must have this knowledge and apply it, but more often it falls to the woman in the family,

and, alas! they are the ones who frequently have had the least training. What training does one require to do this intelligently? Household commodities are not confined to a few things. Commodities, you remember, commercially, include everything that is bought and sold except animals—while broadly, we class under this term all that affords us convenience, advantage, or profit. Think how broad our knowledge needs to be! There is no business that requires a keener mind, a deeper knowledge, a broader grasp of the whole subject than that of home-making, and an important part of successful home-making is intelligent knowledge of buying.

How are the right people to obtain this? In other words, what are the actual needs for intelligent purchasing in this line? In answering this question I cannot give you beautiful theories or finely rounded sentences but must present my suggestions in a simple, possible, practical manner. One of the first needs that confronts us is an intelligent knowledge of the requirements of the individual home. Each home differs, or should differ, from its neighbors, and, while certain rules are general, well-nigh innumerable exceptions should be made. These exceptions pertain to the manner of life, the mode of furnishing, the customs of the home.

There is a limited group of women who think keenly, feel deeply, plan carefully, spend wisely, and these can step into any position and fill it well. As yet, however, we have but a few of these—may their tribe rapidly increase! To help on this desirable work let us give every woman a clear, sane idea of the value of money, and I know of no way in which this can be better done than by allowing her to live a business life for a short period, during which time she will be compelled to conform to all the rules of the business world and meet her own expenses in every way. Of course the fixed allowance in early youth helps and the training of the growing girls and boys by taking them into partnership in the managing of the home will leave its own indestructible impression, but the practical doing is extremely necessary.

Let us say that the needs of the home are understood and the value of money is clearly in mind, what do we need next? Much is said today about efficiency. When it is a question of the efficiency of the laboring man as presented in the magazines of the month there may be two sides of the subject, both of which are worthy of consideration; but when we come to speak of the efficiency of one hundred cents in its power to make comfort in the home, it seems to me there should not be two sides! How may one hundred cents be made to do twice the service they are now doing? We cannot arouse increased power in them, but surely we may arouse increased power to plan wisely in the human brain; yet will a purely theoretical course accomplish this? I doubt it. We live in a sternly practical age and this problem of the efficiency of the dollar must be solved by practical, experimental means. When we have thus arrived at the real value of money, we will be ready to pass on to our next actual need, and

that is a knowledge of the genuine value of your purchase. By genuine value we mean the value of the material of which the commodity is made and the value to the purchaser: no matter how great the so-called bargain may be, unless it is really needed in the home the person purchasing it has not received the equivalent for her money. It seems sometimes as if some would be thoroly trained in this realization of the genuine value of the dollar by being forced to pass the shops day after day and see the bargains (so dear, it is claimed, to every woman's heart) and yet have neither time nor means with which to buy, but I know that it is not so.

Besides knowing the genuineness of the material, in many instances it is our duty to know under what conditions the purchases have been manufactured. We have a social duty to perform and this forbids us to save a few insignificant cents at the cost of the life, purity, or health of men or women. Sometimes we cannot tell, yet the article must be bought, and then it is excusable, but more often we might have known but we would not. It is easy to walk with the crowd and look simply at the surface; it is hard to break away and seek out the fundamental things. But our growth is measured by the ease with which we master the so-called hard things—and everyone wishes to grow.

If we have now mastered these primary needs toward intelligent purchasing, we shall be able to select furniture that is easy to care for, hygienic in make, graceful in pattern, and strongly made. Cooking utensils will be chosen for their wearing qualities and the ease with which they can be cared for, not for their lovely coloring. Table linen will be tested for good, genuine linen threads and silk will be likewise tested before it is purchased, (provided a sample can be obtained). I find many places where no silk samples are given—whether it is because the dealers know the silk is filled I know not. Sometimes I think that may be possible. In foods our student will know when fruits and vegetables are in season and therefore at their best; she will understand the value of a balanced ration and will give this in attractive form to her family. Commercially the meat she may buy may not be classed as a commodity, but it certainly may be in a general way, and this explorer will know the simple things about the common kinds and cuts of meat. These are but a few things that must be learned in detail before one has acquired the mastery of the large amount of information necessary for the next need.

Nearly every family has some certain income. Of this there must be a division, and to this again our student needs to bring all her acumen and experience, and sad indeed is the condition of that one who has nothing practical to bring to this. In these days when there are so many, many demands upon us there must be a clear understanding of how far a certain sum can go and should go, and what proportion may be allowed for food, and what for clothing, and so on. Sometimes it will be impossible to keep within the bounds and then we can fall back upon the contingent fund,

which should be kept for just this purpose. If people have kept a record of their personal expenses for a number of years they will be able to average up the probable cost in that line, and if the same has been done in the household there will be another basis upon which to build.

Even yet, however, the actual needs for intelligent purchasing are not all met. We need sadly in these United States a thoro training in the beauty of simplicity; in the restfulness of space—bare space, when rightly placed. We need schools which not only train the students but also test the new conveniences as they come out from year to year and testify to their real value. We have a few places where this is being done, but in every large city there should be a "clearing-house" to which housekeepers could go and learn what is best for their purposes. If the women's clubs would establish something of this nature, it seems to me that they might accomplish much along a line that should be especially theirs.

As to household accounts: When you ask for practical methods in this line it is difficult to know what to give. What is practical for one is Greek for another. I know business men who have taught their wives to keep the accounts in exactly the same way in which the trained bookkeeper keeps them in the office. If this does not "get on the nerves" of the wives it is the ideal way to do; if it does, why, try another. The important thing is to know how much you spend and what you spend it for. I know a family who keep a careful record of everything. If you want to know how the monthly bills of ten years ago compare with now, a moment's time is sufficient and the record is before you. Would you have the price of a dollar's worth of sugar in January, 1900, a few moment's search and the information is yours. Yet no real bookkeeping was done; a few five-cent notebooks were kept at hand and each month the daily items were brought into system and order. The yearbook did the rest.

I could put my hand upon a set of little books kept in this same way in which the running expenses of a farm have been kept for many years. A few minutes are required daily to enter the profit-and-loss amounts and a few hours monthly, but the satisfaction is very great.

Briefly let me enumerate our actual needs for purchasing of the commodities:

Understanding of value of time.
Understanding of meaning of home.
Understanding division of income.
Understanding of meaning of money.
Knowledge of purpose of commodity.
Knowledge of conditions under which it was made.
Knowledge of real working value.

As to the accounts:

Double-entry bookkeeping, if it be agreeable to both parties.
Simple notebooks if these meet the needs.
A daybook for jottings; a monthly-account record; a yearbook plainly kept.

But whatever method is used and whatever our needs may be, always we shall require a large amount of that rarest of all good gifts—genuine common-sense.

REPORT OF THE COMMITTEE ON NOMENCLATURE

In the judgment of this committee the term "home economics" should be used to designate the subject as a whole wherever it is taught, qualified only by the terms elementary, secondary, and higher, as commonly applied to courses of instruction of different grades. It was moved that the definition of home economics formulated by the Committee of the Association of Agricultural Colleges and Experiment Stations on College Courses in Home Economics be adopted:

Definition: Home economics as a distinctive subject of instruction includes the economic, sanitary, and æsthetic aspects of food, clothing, and shelter as connected with their selection, preparation, and use by the family in the home or by other groups of people.

Instruction in this subject should be based on the laws of the physical, biological, and sociological sciences. The presentation should be graded according to the maturity, attainment, and purposes of the students.

Aim: In the elementary schools the central thought should be the acquiring of skill. In the secondary schools, while the work should lead to greater skill, it should also develop "the reason why" and cultivate the scientific method of thought by means of experiment. To this end it should be correlated carefully with the work in other subjects so as to economize the time of teachers and students.

In the higher institutions, while skill and applied science and art are fundamental in the instruction, there should be the broader, scientific, economic, and sociologic view, and whenever practicable, the development of research.

ELIZABETH C. SPRAGUE, *Acting Secretary*

ART EDUCATION IN PUBLIC SCHOOLS A NECESSITY OF CIVIC PERFECTION

ARTHUR B. CLARK, ASSOCIATE PROFESSOR OF GRAPHIC ART, STANFORD UNIVERSITY, CAL.

The subject which stays in the curriculum must serve the actual needs of life. This demand of the present decade is emphatic. The art teacher must not only believe in art but must demonstrate its worth, and the manner of its worth to the community in which she teaches.

We art teachers have ideals which will revolutionize industry and habits of life. Our creed is belief in perfection—a symmetrical development in which beauty is an organizing element, entering into all the activities of life, as grace in movement and gesture, as music in speech, as order, rhythm, and harmony in all material surroundings. In the manual arts, specifically, we art teachers believe that every visible human product should be significantly beautiful and that all people should enjoy the pleasure which comes in consciously producing or observing this condition of perfection.

We believe that the imagination of the workman or power of mind which "sees beyond the fact" should operate as he works, that his time

of labor may have significance beyond its material use; may be the full record of a human being.

There is little labor which may not have artistic expression; even the coal miner may sing at his work, if the hours of labor are short. It is a duty of society to see to it that every laborer is kept happy. This is essential to every satisfying ideal of human civilization. A community of workmen who are artistic, striving for perfection, recording the dreams of their minds in their work, note not the passing of time, in spirit they are free men.

A chair should be more than a seat, its maker more than a machine; the house should be more than a shelter, its occupants more than cattle; the public building should be more than an opportunity for fat political contracts, rather a civic triumph in beautiful building, as conceived by and expressing the ideals of an enlightened community, a community made up of men who have found and developed their souls in their work.

For our souls live not in invisible vapor, but in the very substance which we call our material surroundings. The Parthenon, the Victory of Samothrace, the Venus of Milos—in these dwell and may be seen the souls of the Greeks. In the Gothic cathedrals dwells the soul of the Middle Ages; without them it could not and did not exist. If any people, or city, or nation build in haste, in sloth, or in ugliness, its soul is ephemeral, unformed, and ugly. As we do, so are we, our manner, our dress, our houses, our cities, be they beautiful or ugly, they are our very selves made visible, what they are we are.

We art teachers know this, we know the reaction of perfect doing upon the mind. To attain the blessings of civilization which a development of the creative spirit can give means radical changes in industrial methods. We believe this change is taking place and is producing healthier conditions of living with true economy of life, an economy based on full realization.

The new industrial education places on people generally and upon art teachers especially, now as never before, new responsibilities and duties, nay, let us rather say, welcome opportunities of giving to future citizens proper industrial ideals.

Beauty, utility, and durability are fundamental ideals without which industry is on a cheap basis. No one of these alone is enough, no two of them without the third is enough, their comprehension should be distinct; utility is not beauty, strength is not beauty. Many people talk about sanitation and utility and durability as if they were talking about the fundamentals of art, but the ideals of imaginative expression and order and beauty are distinct from these. All are needed in perfection.

Capacity for art is as deeply seated in human beings as is any fundamental quality, but bad education has so atrophied it that we are incredulous. In an address before the Eastern Art Teachers' Association, in 1908, Dr. Denman Ross said:

The appreciation of the beautiful, whether in nature or in art, means a constant habit of observing, comparing, and selecting the best—the best from the point of view of design, the best in shape, the best in form, the best in color. That is the practice which will make us lovers of order and sensitive to beauty, but it is the practice of the few. It is the few only who are concerned about the beauty of particular examples, whether in nature or in art. . . . . Nature gives us certain senses and faculties, among them the creative imagination; but our interests, our motives, our impulses and enthusiasms, are not so much the gift of nature as a result of education. . . . . I am thoroly convinced that the love of order and the sense of beauty can be given by education quite as well, better indeed than the love of knowledge. It can be given by the teaching of art, but it must be the right kind of teaching. . . . . The teaching of art that I have in mind means, not learning things, but doing things. It means doing things in the spirit of art, for the love of order, for the sake of beauty. . . . . All I ask you to admit is this: that underlying the many and varied activities of human life are certain elementary and essential practices upon which the expression of life depends. The teaching of art which I have in mind to present to you means practice in the elementary and principal modes of expression, not merely as useful arts, necessary to the conduct of life and its progress and development, but as fine arts which will make life more orderly, more beautiful, and consequently better and happier than it is. It is the practice of the arts, not merely as arts, but as fine arts, that we must put into the public schools and into our colleges and universities everywhere.

One who acquires this habit of mind, by developing the capacity for enjoying beauty which the Creator has given him, will find his soul expanding under a new influence.

The blind mole burrows under the ground, his world, a narrow tunnel. Place him above the ground (as the writer did one recently) and he uneasily seeks to burrow into earth again. The freedom of the open air with horizons far away and senses with which to use this boundless space the mole has lost. He can only burrow in the earth. Some Americans abroad, in the art galleries, are likewise uneasy, and even some teachers of manual arts and drawing, with every opportunity at hand for expression of beauty, have the mole's blindness to it.

But the person with properly adjusted life will have a passion for order and beauty which will show in his surroundings. He will live in a house of good design with windows opening upon broad views. Our souls are as broad as the horizons which we perceive, but no broader. The furniture and all appointments will express the owner's taste. The very sash bars of the windows will cut the landscape into well proportioned pictures. I recall one artist who nailed some plain sticks across large panes of glass and obtained a pattern of beauty which the designer of the house had been too thoughtless to produce. Our man possessed of an alert artistic sense, the person whom we art teachers will train, will also enjoy local art in houses, in public buildings, in paintings, and in nature itself. Photographs will bring the world's greatest art to him. Even tho a laborer, he may afford to possess photographs, while the more prosperous may travel to the great museums and among the cities where the choicest achievements of artistic minds are preserved.

The essential methods for attaining the artistic habit of mind may be summarized in three: doing, seeing, and more doing.

1. *Doing*—getting started, getting initial experience in using the creative faculty, taking elementary lessons in design, awakening the artistic sense—the method of study which is, indeed, quite frequently followed in teaching design all over the land, the method first introduced by Professor Dow and Dr. Ross, the combining of simple elements into arrangements of beauty, with a study of simple examples of pattern such as occur in Indian baskets or pottery, in Greek frets, in Coptic embroideries, and in similar places. These examples inspire beginners with faith in the value of such simple methods as they are themselves using. People learn only by doing with their own minds and hands. The impulse of the artist must be experienced by creating if one would know what art is. These exercises call into life faculties which are sadly ignored in most schooling.

2. *Seeing*—learning to see, and to understand beauty where it may be found in nature and in art. For most people, once the artistic sense is aroused, the greatest amount of artistic pleasure will be had thru contemplation, the appreciation of others' work. The great work of the past is in reach of all who know how to obtain and value it. Inspiring also is the work of living artists, in painting, in architecture, in sculpture, and in the applied arts. Educated by these, one may not only enjoy the beauty which they present, but he may see nature thru an artist's eyes. He may see beauty in the curve of the river, in groupings of buildings, in the supporting contours of trees and gables—as they may occur in his daily passings to and fro. In the busy streets, windows, doors, piers, and towers will group themselves into well-balanced relations, and the people who throng the streets will exhibit to him, in action and repose, statuesque attitudes of dignity. To study the lines of figures and costumes and faces as a sculptor or painter does, in the spirit of design, seeking those effects which make for unity, for dignity, and expression of character—to do this is to have great pleasure.

To study the devices by which unity in any form results is most interesting. It may occur thru the unbroken horizontal lines of a façade, as in the Parthenon, it may occur thru the binding effect of a wayward pathway in a Japanese garden, by which the remote features of the garden are promised—whereas a field of corn can lose either end or its half and still be complete. The cornfield is commercial, the Japanese garden is artistic in its relation of parts.

Likewise with the principle of balance, or neutralization of unlike or unequal things; likewise with principles of harmony of color, and rhythm of sizes and other elements in an object of beauty. To know the laws of art and to habitually study their various manifestations is to live more fully.

3. *Doing continually*—shaping one's daily life in a broad conception of artistic opportunities is most important of all. It means the positive

attainment of beauty in all of one's material surroundings. To illustrate this idea: suppose one is designing a desk; he will first consider the function it will have in relation to the room it is to occupy; he may also receive aid from such an example of art as the Parthenon, by observing its space relations and emphasis of leading lines, the modulation of shadow in transition from plane to plane, its suppression of details in some parts and emphasis of them in others. More important still is the fact that one who knows the Parthenon at all adequately and has in mind its standard of perfection, will hardly approach any problem of design, even of a desk, or make any purchase, cheaply. The spacing of a Japanese temple, or a Gothic cathedral, or a mediæval chest, or an Indian basket could be used for study and inspiration in reference to this same desk.

The method of reference to the art of the past—invoking its principles and spirit to aid in practical affairs—is far different from the study of the "styles," so called, resulting in a slavery of imitation. The one is a growing into and living the life of art; the other is cataloging its dead forms.

If the art amateur (amateur means "lover") is a real-estate merchant and subdivides a tract of land into building sites, he will so lay out the streets that beauty will result. He will recognize and develop the natural beauty of the site. San Francisco had glorious possibilities in her hills, but the hills were ignored, and the unsuccessful attempt must be kept up of pretending still that she has no hills. Some streets climb over them, some are tunneled thru them, some of the hills are carted away. What a beautiful city could have been made if the main streets had followed the water courses up thru the valleys to the summits, with the lesser streets branching from them. Nature was suggesting this, but the early settlers were not art amateurs.

Again a broad conception of one's personal art will insist that it be personal and local in its suggestion, an idealization of local experiences even tho qualitative inspiration may be drawn from the past. For example: the musk-melon vine and leaf, or a house cat, may be vital home symbols for one family, while the Persian pomegranate, or Indian elephant, or Norse swastika can, at most, have but playful suggestions of emotion to us. The red Sierra snowplant means more to some Californians than does the phoenix bird or the Swiss edelweiss, and to such it can have marked significance when used as a symbol in decoration.

In building a house one may well consider how the best houses of other countries are made, but it is equally important to know how competent local architects adapt local materials to prevailing colors of sky, of soil, and of foliage; or what kind of expression, that of shelter from the sun, or that of exposure to it, is most grateful to people familiar with the climate. When this is determined the manner of expression becomes the problem and concerns such things as the use of broad shadows or small ones, of

light colors or dark ones, of sheltered windows or exposed ones, to obtain the expression of mood desired. This requires expert skill.

When all the people of a city or of a community are thinking of these things and, as art amateurs trained in the public school, have become awake to art pleasure, what beautiful architecture will result!

What can the art teacher do to bring about this result of national importance, a civilization in which taste prevails? The art teacher has most of the task to accomplish. The schools must always furnish and spread widely the best ideals. I hope to show how this may be done effectively and even speedily in art matters.

In an eastern state a bright teacher became superintendent of schools in a remote and unprogressive county. He was received with hostility. He encouraged the boys of the schools to plant each a plot of ground with seed potatoes which had first been treated with a certain chemical solution. The result was that the boys harvested, from their gardens, crops of potatoes free from scab; while the untreated seed in their father's fields had produced crops of scabby potatoes. That was effective teaching. The boys learned the lesson and so did the fathers and uncles of the boys—a lesson in applied science of which they stood in need. Mark how the teaching was done: by carrying the demonstration into the home. The proof did not rest upon the teacher's word, nor upon the authority of a textbook, but upon the clean skins of the potatoes which the boys dug from their own gardens.

We teachers of art need to make clear demonstrations in the homes of our several communities. And what opportunities are ours in the advantages for display which our product affords!

The school superintendent could not the first year control the planting of the fields, but he could influence some garden plots. So can we control a small part of each pupil's home.

The need for the practice of good art in each community is more needed than the raising of clean potatoes. Vulgarity is now generally practiced and it is more expensive than beauty, whether measured in cash or in terms of spiritual enjoyment. Money is being wasted on useless bric-a-brac, on cheaply designed and stickily varnished furniture, on gaudy wall paper, on band-sawed and machine-made mouldings, made by buzz-saw-minded mechanics, who, if rightly trained and occupied, might just as well have been lovers of beauty. Stoves are covered with glistening nickeled contortions, carpets and rugs are woven in meaningless medleys of line and color mixtures. Rugs and tables are placed criss-cross in rooms, and dress is ruled by fashions in novelty, rather than by principles of beauty and adaptation to personality.

The waste is not only of the money, foolishly expended, but waste of the people who produce ugly articles.

Cities and villages which would be beautiful if made on consistent

plans of beauty, are thoughtlessly laid out in offices, with T squares, into uniform blocks; instead of being studied with reference to natural advantages of site, with some streets as main arteries converging toward centers of marketing, or of banking, or of manufacturing, or of living; with quiet withdrawal places near these centers affording retreats from hurrying and crowding. Each district should have its own individual charm, with variety in sizes and shapes of blocks and with distinct features. I can think of nothing more oppressively inartistic than the miles of uniformity in certain streets of large cities. To change this requires community consciousness and action.

All people of our land: rulers, laborers, buyers, makers, and sellers need to learn the lessons of artistic values, that thought, design, appropriateness, adaptation to individual conditions, alone make worth; and not speed of production, nor mass of population, nor magnitude of duplication, nor recentness of style, nor glittering prominence of material, nor mechanical "system." The very people who most frequently waste money and leisure in cheap vulgarity are the very ones who have the least money and leisure to waste. But the idle rich people who have means but who have not the culture to use it waste also.

There are enlightened people who live beautifully, as there were enlightened people who knew how to prevent potato scab years ago, but the farmers of the remote country learned it only when the schoolman forced the lesson upon them.

I am afraid that in art matters the numbers of the unenlightened predominate. This lesson of beauty in life will not have national and civic proportions until it reaches the wage-earners, who form 96 per cent of the whole population. The sales of our large stores are to these, and in the stock exposed, tawdry furnishings predominate still. We must not be complacent while this is so. Our privilege is to train the whole community into a love of the beautiful. If it seems appalling to think of giving to specific individuals, to "Old Bill Jones" or to "Aunt Sally Brown," souls which crave art, remember that the school superintendent spent one season in getting potatoes planted in the gardens. And one "Old Bill Jones" came to him to buy the secret of the chemical. He was told that the "secret" was free to all who read agriculture bulletins.

One school girl was encouraged by her teacher to stencil some window curtains for her sleeping-room. The mother, a cultured woman, was nevertheless incredulous, and furnished, at first, only material for a woodshed window; but the result was so pleasing that richer material than had at first been asked for was furnished for the chamber windows.

In order to convince the community it must be reached in all ways: thru the factories which make things, thru the stores which sell them, thru the woman's clubs and societies, thru societies of architects and artists, thru lectures in public halls, thru exhibitions of paintings, drawings, and

photographs. These are all agencies which may be utilized in a propaganda of education. The pupil will receive benefit in these collateral agencies if he is made to have a part in them.

Hints have been given as to the spirit and breadth of application of art ideals. In organizing art instruction what shall the method be? What shall be the backbone around which to group instruction? This question can only be answered here briefly. Drawing must be taught, of course, that pupils may learn to handle pencil, pen, and brush with graphic facility, but in this, possibly, drawing teaching has concerned itself too much with abstract expression and not enough with the expression of vital, interesting ideas. I say emphatically the central idea of art teaching should be applied art, the art of dress, of home-building and furnishing, of civic art.

There is not time now to consider each of these, indeed they overlap, but what instruction in home-building and in civic art may be, can be briefly hinted at in the time remaining.

In the study of home art; house-plans need brief consideration, next the art of an interior, the production of unity by arrangement of emphatic lines and a controlling color scheme, the disposition of draperies, the rugs, the stencilling possibly of a pattern for a frieze, or for parts of window panes and window curtains. (Effects similar to those of leaded windows may be made by painting the designs on thin paper and then fastening them to the glass by varnish.) The space design of each side of the room should be taken up in turn, with places for pictures, for doors and windows, for furniture, and the relative emphasis of casings and bands as the elements to be bound into a space design.

The question of pictures which are available and desirable will arise. Information may be given as to what reproductions of the masterpieces in architecture, in painting, and sculpture and the lesser arts may be purchased. The work of local artists should be studied also.

Wood stains and finishes will need consideration, likewise the choice and design of furniture, chairs, tables, light-fixtures, door hardware, the use and abuse of bric-a-brac, the making of pottery for dishes and fireplace tiles. The subject expands inevitably. Probably too much of the time in applied art has heretofore been occupied in making unrelated, or "faddish," articles. Copper corners for blotting pads, for example, are not as essential as a design of family significance, sawed or etched into the key and knob plate of a door. Art-in-place is the goal to be attained.

While drawing may serve as the chief vehicle in considering and in studying these ideas, it is not the only vehicle. An experimental room of the school building, possibly a lunch- or rest-room, may be furnished and decorated in various color schemes and with various textiles, as a demonstration. Even draperies hung on rods may illustrate many ideas. The furnishing stores welcome visits from classes, and give their services in arranging floor coverings and hangings to go suitably with them.

The exterior of the house is just as fascinating and fertile in study of the beauty it affords: first comes a study of unity in massing of the house, in the sky line, and its placing on the lot in reference to its surroundings; then the consideration of different materials, their textures as rough or smooth, and the suitability of their treatment. As in the interior, the arrangement of openings and emphasis of leading lines is nothing but an application of the principles of space design.

A few types of houses should be studied: Colonial, Bungalow, English, Mission. These pupils will all build some day. We want them to build intelligently.

Drawings of the yard-plan and sketches showing the composition of house and trees from various points of view are useful here. Door-yards should be arranged to contain broad lawn surfaces with planting beds of flowers and shrubs subordinated to them, or placed toward the margins, rather than in the centers of conspicuous ovals. The composition and breadth of the Japanese gardens may give lessons in this. I have at hand a photograph of a garden in America filled with Japanese "properties"—a pond, a stork, a lantern, a foot-bridge, a path, a hill; but it is a jumble, a junk shop. Also, at hand, I have a photograph of a real Japanese garden as it exists and has existed, perhaps for one thousand years. It has the "properties" of the imitation, but it has them arranged with art. It has breadth and comprehensiveness of purpose, which the imitation lacks. From every point of view it affords pictures of unity with details subordinated.

If there are hillsides in the community, inspiring problems may consist in developing the possibilities of building sites on both the upper and lower sides of the roadways, with plans for treatment of yards in provision for walks, steps, porches, and outlook. In these problems drawings and sketches will again serve as vehicles of ideas.

Just at hand is a photograph of a bridge which connects two parts of the city of Würzburg, Germany. Four huge stone lions guard the abutments of this bridge, so nobly conceived and placed that the purpose of the bridge is intensified. The bridge affords the wayfarer more than a means of crossing. To me it is one of the most pleasant experiences of a summer's trip. Those lions would not have the same interest on pedestals in a museum. Just such opportunities are waiting to be realized all over our country. Beautiful bridges and lions (or something else) are needed over many streams. Why shall not the art teachers by tactful use of photographs, in showing what has been done, and by the assignment of such problems as the design for a bridge, or for a city-hall park, or an approach or plaza to the railway station, or the beautifying of embankments, roadways, and piers, of cities and towns; and not thru the beautifying merely, but thru the positive inspiration and instruction which refined civic architecture and sculpture and painting can give: why not in such

ways as these shall the art teachers guide, prepare for, and control the future civic art of our country?

The task of the drawing teacher has become enlarged. Yes, and it has become real! The teachers of industrial arts and domestic science are now overlapping our work and assisting in it.

If all the work suggested is carried out will there not be superficiality? The remedy is to insist that some of the work shall be intensely done, the rest can be suggested. This cannot all be done in the grades, perhaps not in the secondary schools. The fact that figures—draftsmen, and landscape artists are usually good craftsmen also, is encouraging; in mastering one art they gain some power in all.

In many parts of the work outlined other ideals than those of art are involved and should be considered: ideals of social efficiency, of community interest, of utility, of sanitation, of cost. The art teacher who believes in symmetrical development should consider them all. Other instruments than drawing and paper are useful. The materials themselves—fabrics, clay, tile, brick, wood-stains—may be handled; photographs of buildings and cities should be studied. Visits to museums and local stores and factories should be made.

But let the art teacher remember that tho dealing with many interests, the teaching of art principles and taste, a love for and understanding of order and beauty in the world is in her keeping. To preserve art from falling into the hands of the mere dilettanti, a plaything for the idle, and to make it the saving inspiration of all who labor: this is the trust of the art teacher. By the fulfillment of this trust shall the state be developed and the lives of its citizens become enr ched.

ART'S SERVICE AS A BASIS FOR CLASSIFIED KNOWLEDGE (SCIENTIFIC DEVELOPMENT)

CHESHIRE L. BOONE, DIRECTOR, DEPARTMENT OF ART AND HANDWORK, PUBLIC SCHOOLS, MONTCLAIR, N.J.

We, as a people, pride ourselves upon a number of qualities which are held to be virtues. Perhaps they are in kind. We claim to be practical, business-like, and true prophets of the trend of the times, inventive in a useful way, and we are above all proud of our industrial growth. There are good grounds for such claims and such pride, but on the other hand, the qualities enumerated lead to at least one rather sordid result. In a comparatively new country, with seemingly unlimited resources, with a rapidly growing population making incessant demands upon the manufacturer for more and yet more and still cheaper products, it is increasingly evident that the business acumen and inventive skill of every artist, artisan, and industrial chief is applied to one end—the accumulation of business and profit.

This agonized pursuit of business brings to the surface a belief that the times are so distinctly industrial that nothing else really matters; the maw of the trade must be filled. More serious still, this extra-stimulated business activity has practically eliminated the workman who thinks, replacing him by an automaton, a machine. There is in this country now no artisan class of quality; only the thousands of laborers who make machines for other thousands of human derelicts to operate. In this rapidly changing industrial pageant there is one element lacking—that of beauty, refinement. It is absent precisely because there is no longer either the opportunity or the necessity for individual judgment, selection, or creative skill. You may reply that the machine can produce anything which the mind can conceive or devise, which is true; but the modern industro-mechanical mind seems to think only in terms of machines and quantity. The designer of today is many steps removed from the actual processes of production, and is more often overruled and brow beaten by the factory, which imposes technical limitations. Therefore the artist-artisan does not devise with the cunning and enthusiasm which characterized the period when he supervised the processes of actual production, when tools and machines were his servants. Now the machine is dominant and manufacture of all kinds is keyed to what the machine can compass in the largest quantity; the inherent worth of any given product as such, and especially its artistic merit, is not considered to be a matter of paramount importance. It may even be stated that in most matters utility receives most emphasis, refinement very little.

If you will be of open mind and receptive, I should be able to prove to you that this ultra-practical kind of designing is incomplete, inadequate, and even wrong—from a business standpoint.

First, you will probably be willing to agree that art in some few elementary forms is essential to real culture. Every race has sought persistently to express its ideals and faiths in permanent fashion—by craftsmanship in drawing or building, by the dance, and by ceremonials—and each and all of these activities are signs of a human desire, more or less undefined, to complete, crystallize, and perpetuate ideas which are socially fundamental. The race could not well dispense with such forms of expression because, by and thru the aggregation and gradual elevation of racial ideals, these efforts toward full expression systematize thinking. And the arts in any age become a dynamic influence in proportion to the skill with which they are handled. But no matter how great the skill of the workman, the result he produces is never really good unless its shows an undercurrent of serious and reverent purpose. The mainspring of all good expression is a kind of method or system of conception which aims toward well-defined, artistic ends, and this method of thinking is in fact the backbone of design.

All civilized peoples embody in their art the sum of their conclusions concerning patriotism, habits and customs, religion, and the interpretation of nature. Out of such conclusions arise standards of conduct and manner,

of living, dress, and beauty, both personal and otherwise, and these in turn symbolize on occasion the individual's position in the cultural scale. Therefore one can scarcely imagine an individual as being cultured, educated, who is not able to enjoy, understand, and sympathize with the arts of his fellows and who does not recognize their functions in the scheme of existence. In other words, I would have you believe that the active element of all development, constructive thinking, and doing, is a thing called design. Why does one employ an architect to plan the house? Any good carpenter knows more about building, and could make the house any shape desired, with the proper number of rooms, chimneys, windows, and doors. What is the architect's contribution to the problem of building?

Why spend money and time on books about people who never lived doing improbable acts in unknown places, when the newspapers and magazines which can be secured for a song tell facts? Is it not because men have come to realize that the construction of the carpenter is but the merest framework of architecture; that the building should be formed, arranged, and decorated thruout to make a distinguished whole, which is functionally adequate and æsthetically inspiring? It represents an ideal, a standard. The buildings of Gothic have left behind the priceless gifts of love, reverence, and appreciation, engendered by familiarity with great buildings. Those tall, graceful spires are a perpetual earnest of hope and encouragement, and cunning tracery of line within the shadow of massive windows serves to embellish the great dignity of the design with a richness which is soothing and pleasurable because of its ever-shifting rhythm. Environment of such kind is always positive in its effect.

Books and literature show similar variations in character and quality. The daily newspaper records facts touching the doings of individuals and daily circumstance, but there is no unifying element in such discourse, no system, and no motive save curiosity. The good novel, on the other hand, presents in well-balanced, consistent arrangement certain human attributes, foibles, and social or political conditions which are typical of a group, community, or race, and which attributes are the indices of quality. The author by his artistry throws into relief the points of vital interest, and by juxtaposition, contrast, and the aggregation of much detail around important topics secures an effect which places the question at issue squarely before the reader. It will be evident, therefore, that the live, active, positive qualities which characterize the work of the artist and craftsman are intellectual, not technical, and are due to design. The architect and the author each has in mind a result which will make a definite impression on the public, and to this end each gathers the data, arranges them, accentuating some, suppressing others, forms groups and combinations of which the accumulation of emphasis gives the desired effect. There is no real difference in method between designing a building and designing a book, plate, or carpet; the design which underlies all artistry, and which articulates

the details of any given problem, is the main factor in all creative effort. To design means to create.

I met two men on the way West, one a fruit-grower, the other an agricultural expert from one of our largest experiment stations. The farmer had been in the past very successful with cherry trees, but for reasons of his own had decided to start an apple orchard. Relying on his experience with cherries, he planted his trees 16×20 feet and in due time found his orchard crowded with fine trees, which, however, did not bear well for lack of light, air, and root space. As the expert stated, this farmer's mistake, which was by no means an uncommon one, cost him thousands of dollars in possible profit. This farmer failed in creating a productive orchard; his plan was made for cherries—not apples.

Let me offer another illustration. You have witnessed many times the establishment of magazines and periodicals which ran a year or two and then vanished. Often these papers were well printed, carefully edited, and full of excellent material. Why did they fail? As in the case of the farmer, the man behind the enterprise either was not in possession of sufficient information and experience, or did not use his knowledge to advantage. A magazine must in some way reach the people who are or may be interested in its aims, and this reading public must increase and give momentum to the publication. If a reading public has to be created, it means a long and judicious advertising campaign. Also, no periodical, however interesting, can exist at the current scale of subscription prices without generous advertising support; hence the reading-matter must commend itself to the business man as a good medium of communication with the public. The would-be publisher must give careful consideration to all these matters if he would even survive, and you will find in the growth of the Country Life Press, at Garden City, Long Island, a splendid example of foresight and planning. *Country Life in America*, *World's Work*, and the *Garden Magazine* are magazines which, with the possible exception of *World's Work*, would have been impossible fifteen years ago. There was at that time no field for such literature. Few were interested in amateur gardening; none but the rich, and few of them, gave special thought to the country estate; and sport was confined to the young; the business man thought his business would go to rack and ruin if he took a day off for amusement in the middle of the week. But there had existed for some time a distinct tendency toward outdoor enjoyment, and the publishers mentioned thought they saw in this movement possibilities which could be developed. They have for some years maintained active propaganda, and have spent thousands of dollars in advertising the attractions of the country, and ways and means of enjoying them. Today there is perhaps no more important development of the manner of living than this.

But the most wonderful part of the publishers' whole scheme is the establishment at Garden City of their entire business, in beautifully deco-

rated buildings, surrounded by some forty acres of ground, which is laid out and maintained as an example of what may be done to make business something less than mere drudgery. Here are situated experimental and trial grounds under the guidance of an expert gardener. There is a bureau of information at the disposal of horticulturists and country-lovers generally. In every possible way the projectors of the scheme have endeavored to make it possible for their public to accomplish results. Now, these men are not actuated by philanthropic motives at all. They aim to make money, and probably have done so, since about a million dollars has been invested in the scheme. And in order to succeed, the whole plan was worked out, with all the skill and business acumen of the modern business man, to accomplish a definite result. This is design of the finest kind, where the designers sought the information, developed the sentiment and conditions, and opened the opportunities required.

To design, to create, arrange, compose, and adjust are co-ordinate, if not synonymous, terms. They apply to any constructive effort. The artist is a truly practical man, even in the most deadly meaning of that modern phrase, because he tries to convince his public that this is the most beautiful aspect of nature, and works to that end.

But mere arrangement is only the backbone of design, which in its higher forms develops the refinements of rhythm, balance, and the like. If you will look into the history of the Aztec empire you will find a civilization which comes as near creative perfection as any modern state, and therein you will find examples of every quality pertaining to design. Unity was secured in this state by the development of the family or tribal unit as the standard element. Further aggregation of these units comprised the districts and provinces, which in turn were responsible to a central ruling body. The most important administrative department—the judiciary—was emphasized as a basis for good government, lending stability to the state and security to the individual. Finally, since no race can exist long at a dead level of monotony, the passions and sentiments of the people were kept in bounds and made to serve the state by a succession of pageants, ceremonials, and games which culminated in one festival of supreme religious and political significance. What better illustration of real design could be given than this marshaling of human motives and ideals toward prosperous, successful government?

If design is such a vital element in human endeavor and action, it should be evidenced in our material surroundings, because these at their best are stimulating in the extreme. A pleasant, orderly home, in our leasure hours; a decent town, with some of the conveniences of modern life, and a feeling of security and confidence in the state—these conditions put one in a proper frame of mind to work and succeed. Such conditions are of our own making. The pleasant home results from infinite labor and experiment; one never finds the beauty of nature till he has grown a garden, made a lawn, and

planted trees; one only finds the perfection of rest and pleasure in the house by placing there the colors and patterns and furnishings which satisfy taste and pride of accomplishment. And if one would have real pride in his community he must take a hand in its upbuilding and embellishment. The manufacturer, the business man, and the politician, being children of gain, give the thing required—it is easy to secure an approximate perfection in both art and business if the individual wants it. Perhaps the real reason for the prevalent low standards of taste lies in the fact that people do not know what they want and have no standards of judgment. There are no common ideals of either beauty or perfection. A nation gets the kind of art it deserves. We here do more than we think. Hence the greatest service art can offer is to foster straight thinking, especially along lines connected with the arts, in order that the works of our craftsmen may stand as symbols of the fine, enjoyable, appropriate thing. If one would teach design properly, he must believe in it as an active force which enables one to plan well, execute with skill, and use with intelligence. He will come to understand that decoration is a method, not a craft; that the carven leaves infolding the Gothic capital or nestling comfortably in the interstices of window tracery have only been loaned by Nature from her storehouse of beauty and grace to enrich man's handiwork.

WHAT HAS ART IN THE SCHOOLS DONE TO PRESERVE AND CULTIVATE THE IMAGINATION?

MAY GEARHART, SUPERVISOR OF DRAWING, LOS ANGELES, CAL.

Art in the schools is certainly not limited to the actual drawing classes, but may be presented at any time and in connection with any line of work. This is true of imagination which has a vivifying influence on all subjects. We cannot consider imagination as a subject by itself. After all, we are not cultivating the imagination, we are cultivating the child. We are not developing any one faculty, placing all our stress on memory, or judgment, or imagination. One thing leads to and embraces another. This is a day of specialization, but if we gratify the theorist by forgetting the other faculties and developing only the imagination, we would get a freak, not a rational child. We may like to read about him or will even pay ten cents to see him in a sideshow, but we object to associating with such an alarming product.

Imagination implies invention, the power to reconstruct or recombine the materials furnished by memory or experience. It is not made out of nothing at all, but must be derived primarily from reality. Johnny saunters along the street watching a dog chase a cat up a tree. He sees a picture of a bear on a poster. On reaching home he tells how a monstrous bear with lashing tail and awful roars chased him home. He has disassociated and reassociated his percepts. What seems to be a glaring lie is an

artistic product born of the imagination. Croce says, "A work of art is an externalized expression of a vision within." Marvelous are the child's visions when made visible in his illustrative drawings. They are so wonderful that often, were he not there to explain, it would require all the wise men of Babylon to make known the interpretation. In the little child's illustrations it is not the neat, proper picture that charms us, but rather the grotesque, enthusiastic scribble that has originality and shows play of imagination. Its inventiveness, its evidence of imagination, are ample compensation for its lack of scientific accuracy. Such a drawing is only valuable in its relation to the child. The moment that the actual product becomes the important consideration we lose sight of the purpose of the work.

Art, with grown people, is a reverential effort at appreciation. With the child, it is a joyous caricature. It is his instinctive attempt to get away from the encroaching responsibilities and solemnities of life. It is a sportive making of faces before he enters the temple of art. He plays around outside this temple. It is our privilege to show him the way in. My approval of the child's caricature does not extend to all caricature, certainly not to that in the Sunday supplement. The child's pictures are the joyous expression of exuberant youth. They may be clumsy and primitive in their humor, but never sarcastic and bitter. The Sunday supplement is mature and cynical, savoring of vitriol and the bludgeon.

I think it is readily granted that the free illustrative drawing of the primary grades is not only amusing but when intelligently directed is interesting and stimulating to the imagination. But as the child grows older he ceases to be spontaneous. He reaches the age of intellectual consciousness and the free, fanciful drawing is out of place and he drops it. Does this mean that we have completed this line of work? Is this all we can do for the imagination? We cannot complete a course in imagination any more than we can complete education. What Matthew Arnold says of culture is true of education: that it is not a having and a resting, but a growing and a becoming. There must be constant change in any growth and the child must grow up. He cannot remain a child. We do not want a collection of Horace Skimpoles. He cannot remain a primitive savage. He would be a burden in civilized life and could not be tolerated so. His sylvan soul must come out of the woods and he must learn to elucidate the complexities that present themselves. The little child's drawings are uncontrolled or directed by intelligent appreciation. Unquestionably it is much harder to arrange a composition, to choose a color scheme, to be orderly in the works of the imagination, than to express any idea that goes flitting by. The older child must order his imagination, making it his tool for a disciplined use. This is a directed imagination, while the other is accidental. Imagination exercised without the restraint of knowledge, discrimination, order, is certainly not art. We strive for the intelligent exercise of the imagination based on principles rather than fancy.

Are we accomplishing this work in our schools? What is the art course in your school doing to preserve and cultivate the imagination? Can we give concrete instances? First we must determine what constitutes evidence. "By their fruits ye shall know them." We want results. Do not misunderstand me. I do not mean immediate results, the securing of mere technical triumphs. I mean far-reaching results, growth, power. We must all be pragmatists. We must lay aside that which brings no results. We must consider the ethical efficacy of expediency. We must adopt what William James refers to as

> the attitude of looking away from first things, principles, categories, supposed necessities, and of looking toward last things, fruits, consequences, facts.

In deciding on any course of study we must consider the probable result. We are not teaching any more in order simply to put a lovely theory into some sort of expression. We are not going to quibble about things that make no difference. We must avoid the tragedy of misdirected effort. In any struggle it is the final issue which counts. What art education is actually doing for the child now in school can only be ascertained after he has lived his life. We are laying a foundation for the things of the future. But outward signs reveal the shaping powers at work. The actual lesson taught each day may seem barren of results for the pupil but by a thousand indubitable signs we know he is growing in capacity. Public taste is improving rapidly. May not art in the schools claim a certain amount of credit for this? The improvement is evident in the simplicity and dignity of our new buildings and in the change in our homes, where reserved color, simple lines, and spare furnishings have taken the place of the ornate decorations of a few years ago.

Among the many exercises employed in the art course to cultivate the appreciation and stimulate the imagination are the study of design, landscape, and the working out of some craft, as pottery. To copy from nature, making a severe imitation, requires no imagination. But when the child draws a nature form and then simplifies and rearranges, working toward the abstract until there is perhaps no suggestion of the original, he must necessarily exercise his imagination. The omitting of the near details alone requires exercise of the imagination. How will it look simplified? For inspiration we continually refer the student to Japanese art, where the charm lies not so much in things said as in things left unsaid.

The value of landscape study lies not in the little water-color done by the pupil at the end of two months' study, but in the new way he acquires of looking at pictures. By collecting and copying sections of the good colored prints in our best magazines he learns that the artist subdues his color, and he soon learns to avoid a disturbing riot of paint. We discuss subordination, repetition, reserve, simplicity. The pupil likes to add these words to his vocabulary. A single word often fires one's imagination. I visited a room recently where a young teacher was presenting the subject

of landscape to an eighth grade. Instead of cautiously developing, of stealing upon the class and surprising them in ambush, she advanced boldly, with the temerity of the very young, and announced that subordination, repetition, and balance were to be discussed. "What is subordination?" A stout, determined child who looked as if he had no more imagination than a tub, held up his hand and answered, "Subordination is where there is a bright color in a picture and around it are dim, dull colors." And as a result of the tubbish boy's inspiration all the class were promptly ready to select examples of subordination in color, altho color, being a more subtle matter than size, would not otherwise have been mentioned. We place a Corot, a Millet, a Ruysdael, before the pupil and ask him to translate it into line, to copy it in simple masses of light and dark, omitting details. He plans a composition and executes it in a simple color scheme. He must think, choose, and use his discrimination. He learns the difference between a picture and a collection of facts, a geographical record. He learns the charm of suggestiveness. It requires more imagination to leave out than to put in. We read to him from Whistler's Ten O'clock:

> And when the evening mist clothes the riverside with poetry as with a veil, and the poor buildings lose themselves in the dim sky, and the tall chimneys become Campanili and the warehouses are palaces in the night, and the whole city hangs in the heavens, and fairyland is before us . . . .

Then we say to him, "Look for something that is apparently poor and sordid but that becomes beautiful under certain conditions," and he perhaps suggests the gas factory down by the river, an ugly monster spitting out smoke and flame, yet often a wondrous sight. One of the ugliest streets in Los Angeles is Aliso Street, leading up thru the warehouse district; but on a misty day, early in the morning or late in the evening, those mean, brick warehouses take on a rosy hue and lose themselves in a soft glow at the end of the street, while high above in the smoky sky swims the court-house dome. At such a time this old street is beautiful.

We study pottery. The pattern painted, the tile or bowl molded, are not the end and aim of this work, but rather the ability acquired to recognize what is good in form and color. It requires not only reason but imagination to clothe a humble brown bean jar with beauty. It requires imagination to grasp the idea that obvious decorations, such as pink roses and gilding, may not be so pleasing as reserve, dignity, and fitness to purpose. It requires imagination to achieve the glorification of common things. Our pupils like to hear about the fairy with the enchanted green hat in *The Blue Bird:*

> Human beings are very odd. Since the death of the fairies they see nothing at all and they never suspect it. Luckily I always carry with me all that is needed to give new light to dimmed eyes . . . . a dear little, green hat. When you've got the hat on your head . . . . it's enchanted . . . . you at once see even the inside of things.

Imagination, children, is like an enchanted green hat.

DEPARTMENT OF MUSIC EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Elsie M. Shawe, supervisor of music, Public Schools.....St. Paul, Minn.
Vice-President—C. A. Fullerton, director of music, Iowa State Teachers College..Cedar Falls, Iowa
Secretary—Estelle Carpenter, supervisor of music, Public Schools.....San Francisco, Cal.

FIRST SESSION—Wednesday Forenoon, July 12, 1911

The Department of Music Education met at the Golden Gate Commandery Hall. The meeting was called to order at 9:30 A.M. by the president, Miss Elsie M. Shawe.

The program opened with two songs:

a) I Rise from Dreams of Thee
b) A Bridal March

by a California composer, H. B. Pasmore, sung by Mr. Thomas Pearson, accompanied by Miss Dorothy McMahon.

The president of the department, Miss Elsie M. Shawe, supervisor of music, St. Paul, Minn., gave an address on "Public-School Music in Relation to the Music of the Community."

The president then introduced William M. Davidson, superintendent of schools, Washington, D.C., who addressed the department on "Music as an Essential in Education."

After this address the president extended an invitation to all present to attend a reception given by the Pacific Exposition Company at the Palace and St. Francis Hotels, where addresses would be given by representatives of that company.

The next number on the program was a violin solo by Samuel Savannah, accompanied by Fraülein Hermine Ricke:

a) Adagio, Fourth Concerto . . . . . *Vieuxtemps*
b) Farfalla (The Butterfly) . . . . . *Sauret*

"Some Mistakes of the Music Teacher Which the Viewpoint of the Child Would Correct," was the subject of an address by Julia E. Crane, Normal Institute of Music, Potsdam, N.Y. This paper was discussed by Miss Victorine Hartley, supervisor of music, Berkeley, Cal.

The president then stated that at the end of the meeting pins would be distributed to the supervisors of music who were present. To each one in the audience was also to be given a box of Burbank's famous peaches as a compliment from the Santa Rosa Chamber of Commerce.

The president also announced that, according to the printed program, cards of admission would be given out at the end of the day's session to supervisors and teachers as a compliment from the Music Hospitality Committee, Miss Estelle Carpenter, chairman. These cards would entitle holders to attend a reception to the California musical composers, who would present selections from their compositions. This recital would be given in Scottish Rite Hall.

The following Committee on Nominations was then appointed by the president:

William B. Kinnear, supervisor of music, Minneapolis, Kans.
Miss M. Teresa Finn, supervisor of music, High School, St. Louis, Mo.
Miss Ida Fisher, supervisor of music, State Normal School, San José, Cal.

The following Committee on Resolutions was appointed by the president:

Miss Julia E. Crane, Normal Institute of Music, Potsdam, N.Y.
C. A. Fullerton, director of music, Iowa State Teachers College, Cedar Falls, Iowa.

The department adjourned to meet at 2:30 the same afternoon in the same place.

SECOND SESSION, ROUND TABLE—Wednesday Afternoon, July 12, 1911

The meeting was called to order by the president at 2:30 P.M.

A. J. Gantvoort, of the College of Music, Cincinnati, Ohio, who was on the program to make the report of the Committee on National Songs, not being present, President Shawe made the following statement:

At the Cleveland convention, three years ago, a committee was appointed, consisting of three members, of whom I was one, to consider the subject of the national songs. The committee tried to make a unanimous report, but failed; in fact, Chairman Gantvoort alone made the report, but it was not accepted.

The committee last year was enlarged to eleven members. More work was done, and they were able to meet in Cincinnati during last winter. When report was made in Boston last year, several questions were raised and a conclusion reached in regard to the "Star Spangled Banner." The version in your hands of the "Star Spangled Banner" was agreed upon by the supervisors at Boston. It is the result of long conference and discussion. A member of the Association said he was going to bring the matter up for reconsideration today.

There are here also two other songs which the committee presented at Boston, but on which there was no time for discussion. It did not take long to come to a conclusion regarding "America," but there was no time to consider "Columbia, the Gem of the Ocean," or "Hail, Columbia."

Pamphlets were distributed containing the songs "Star Spangled Banner," "America," "Hail, Columbia," and "Columbia, the Gem of the Ocean." A long discussion followed and the different songs were sung repeatedly and criticized. It was finally resolved and carried, that the action of the Music Department of the National Education Association at Boston, in regard to the adoption of the arrangement of "Star Spangled Banner," "America," "Hail, Columbia," and "Columbia, the Gem of the Ocean" be reconsidered and referred back to the committee of 1911, to be brought up for discussion at the meeting of the Department of Music Education in 1912, together with the suggestions made by this body to the chairman of the Committee on National Songs; and that the changes mentioned and discussed in this Round Table meeting be considered by the committee.

The president then announced that the report of the Committee on Terminology would be given by William Kinnear, supervisor of music, Minneapolis, Kans., as Charles I. Rice, the chairman of the committee, was not present.

Following the reading of this report, it was moved and seconded that the report be accepted as presented by the Committee on Terminology; and that secs. 3C and 3D be adopted as corrected and presented by the committee at this time.

It was moved and carried that the report of the committee be accepted in regard to the primitive, harmonic, and melodic scales.

The Department adjourned until Friday, July 14, at 9:30 A.M.

THIRD SESSION—Friday Forenoon, July 14, 1911

The meeting opened at 9:30 A.M., the president in the chair.

Violin solos were rendered by Miss Edna Cadwalader, accompanied by Mr. Arthur Foote:

a) Aria . . . . . *Pergolesi*
b) Gavotte . . . . . *Rameau*

The first address given was "Music in the Colleges," by Arthur Foote, composer, Boston, Mass.

This was discussed by Frederick E. Chapman, director of music, Cambridge, Mass.

The next address given was "The Relation of Music to School Activities," by Ida M. Fisher, director of music, State Normal School, San José, Cal.

After this address vocal solos were sung by Frederick David Galloway, boy soprano, who was accompanied by Mrs. Marriner Campbell, his teacher, in

a) Sing, Smile, Slumber	*Gounod*
b) Sunrise	*Wekerlin*
c) Sweet Miss Mary	*Neidlinger*

He was accompanied in Chadwick's "Allah" by Mr. Foote.

This was followed by a paper, "Public School Music and Our National Speech," by Mrs. Frances Elliott Clark, Camden, N.J., and an address by C. A. Fullerton, director of music, Iowa State Teachers College, Cedar Falls, Iowa, on "The Opportunity and the Responsibility of Normal Schools in Public-School Music."

The following report was submitted by the Committee on Resolutions:

The work of the Music Section of the National Education Association at its San Francisco meeting in 1911 has been characterized by a spirit of general good feeling and helpfulness, which augur well for the future.

While it was the sense of the meeting that the decision regarding the exact form of the national songs should be referred again to the committee, the vote was taken after a discussion which emphasized the importance of seeking not personal preference in the matter, but such a version of the songs as would be best sung by the multitudes. We would extend our thanks to the committee, expressing our hope that large bodies of people in many places may be induced to sing the various versions of these songs, and that results be reported as a guide in the final decision as to the one most generally well rendered.

We would put ourselves on record as in hearty sympathy with the work of the Committee on Terminology and as approving of the work already done.

To our hosts in San Francisco we express sincere gratitude for the royal reception given us.

The opportunity to hear the compositions of California's master musicians was enjoyable and beneficial to all.

To the local committee, Miss Estelle Carpenter and her assistants, we extend most cordial thanks, with deep appreciation of the strenuous labor that has been necessary in bringing to successful issue so great an undertaking.

The hall for the meetings has been ideal, the decorations were highly artistic, and all provisions for the pleasure and comfort of the visitors have been most thoughtfully and wisely managed; and has not some kind fairy adorned us with this beautiful souvenir of Lowell Mason, the Father of School Music?

This committee expresses its sincere approval of the wise and dignified leadership of our president, Miss Elsie M. Shawe. The success of such meetings as these must depend in a large degree upon the power and tact of the chairman. The attention and interest manifested at all the meetings reflect great credit upon the one who has so ably filled the chair.

The Committee on Nominations submitted its report as follows:

For *President*—C. A. Fullerton, director of music, Iowa State Teachers College, Cedar Falls, Iowa.

For *Vice-President*—Julia E. Crane, Normal Institute of Music, Potsdam, N.Y.

For *Secretary*—Arthur G. Wahlberg, supervisor of music, Fresno, Cal.

A motion was carried that the report of the Committee on Nominations be accepted and that the secretary be empowered to cast the ballot for the election of these officers for the ensuing year.

A motion was duly made, seconded, and carried that the Department of Music of the National Education Association request of the Board of Directors of the National Education Association the amount of $25 for the publishing of the *Annual Report* of the Committee on Terminology of the Music Department, a permanent committee of the department.

The meeting then adjourned.

FRIDAY AFTERNOON, JULY 14, 1911

On Friday afternoon, July 14, at 2:00 P.M., the Music Hospitality Committee, Miss Estelle Carpenter, chairman, gave in Scottish Rite Hall a reception to the California musical composers, who presented selections from their compositions at a recital given to the National Education Association members especially interested in music. The concert was a great success, and Mr. Arthur Foote, the guest of honor, was present thruout the entire performance. There were so many applications for tickets that the concert was repeated on the following day.

ESTELLE CARPENTER, *Secretary*

PAPERS AND DISCUSSIONS

PUBLIC-SCHOOL MUSIC IN RELATION TO THE MUSIC OF THE COMMUNITY

ELSIE M. SHAWE, SUPERVISOR OF MUSIC, PUBLIC SCHOOLS, ST. PAUL, MINN.

Much has been written on unmusical America and how it can be made more musical, and those with a deep and clear vision have said, only thru the public schools can this be accomplished.

Our people, to be really musical, must come, thruout this entire country, to love music more and more, and there is no surer way of effecting this than thru the children.

One of the purposes of music in the public school should be to create a musical community as a contribution to a musical nation, and this result can be brought about only when the efforts to develop music in the school are conserved and bear fruit outside, both during the school life of the child and after he has left school.

Music has without question made wonderful strides in this young country of ours. The large, expensive orchestras supported in many of our cities, and the fact that a long season of grand opera is held each year, at an enormous expense, in New York, Boston, Philadelphia, Chicago, and other places, bear testimony to the love some of our people have for music and the sacrifice they will make for it. But orchestras composed of good professional musicians and the opportunity to hear grand opera from time to time will never make our people musical: music must come nearer to us than that, in fact, become a part of ourselves, before it will come forth as a personal expression of what we feel—and Americans, so far, have done very little in original expression or composition.

Germany is said to owe the pre-eminent place it holds in the musical world today to music in the home; and this brings us to our first consideration—the relation of music in the schools to the home.

One of the foremost musicians in America today, a German by birth, has said that he owes his musical gift not to his father, who was noted as a conductor, virtuoso, and composer, but rather to the lullabies and other simple folk-songs that he heard from his earliest infancy from his mother's lips.

The German child hears good music, both vocal and instrumental, every day in his home, and thru much hearing, music becomes the natural form of expressing the sorrows, joys, and other deep emotional feelings of his life. Now how can our public schools assist in bringing more music and music of a better quality into the home? First, by having nothing but the best music sung or played in the school; and second, by including in the course of study, many beautiful folk- and other simple but good songs, which thru love and familiarity the child will naturally carry to his home. The great number of good music-readers, supplementary songbooks, and codas published in late years, furnish a splendid collection from which we can choose much of the very best song literature for children, and so if today the children in our schools fail to get the best possible music for their needs there is no excuse for it. In the opinion of the writer, vocal arrangements of even noted instrumental works should not be given the children to sing. The reason for making vocal arrangements of such beautiful compositions as the *Andante* from Beethoven's *5th Symphony*, *Intermezzo* from Mascagni's *Cavalleria Rusticana*, etc., was, no doubt, for the purpose of acquainting grammar-grade children with these classics, in order to refine their tastes and to cultivate in them an appreciation of the best in music. The motive is a worthy one, but the writer feels that the unsingable qualities of great instrumental compositions are a sufficient reason for not expecting boys and girls thirteen and fourteen years of age to try to interpret them, and so has always discouraged their use. With the advent of the mechanical piano player and talking machine in the schoolroom, the children can now in a much better way become familiar with good instrumental music and also vocal music which is beyond their powers of interpretation, and it is to be hoped that in the future the children will learn to love such music thru hearing rather than singing.

The talking machine and mechanical piano player serve a great educational end when they reproduce the good in the art of music; but unfortunately the poorest and lowest forms of the art are also available and at present satisfy the taste of a large number. Here is an additional responsibility for the teacher, as it now becomes the duty of the supervisor to select music for the children to hear that will cultivate in them an appreciation of the very best in the art. The repeated hearing of the works of Beethoven, Schubert, Schumann, Wagner, Verdi, and a host of other great composers whose compositions can be procured for these mechanical players, will mean a taste for the best, and this is bound to react on the home, not only in the future, but at once. If the children enjoy Schumann's *Träumerei*, Schubert's *Serenade*, and the *Pilgrims' Chorus* from *Tannhäuser*, they will not care to hear rag-time and cheap street music and will discourage the use of the latter in the home and urge the substitution in its place of compositions they have learned to love in school.

It is the custom in some cities where the public schools are provided with

mechanical players to have a short program once a week between eight-thirty and nine o'clock; the instrument is placed in the hall and by having the doors of the classrooms open, the children on that floor can hear the music and receive a valuable lesson.

Some, I believe, see cause for alarm in these marvelous machines which reproduce without any effort on our part the great master-works and greatest voices of the world; these people fear that there will soon be no incentive to study music, since it can be enjoyed from the listener's standpoint without going thru the slow process of cultivating a technique. A needless fear this seems to me; the large majority of people will necessarily have to be classed among those who listen, rather than perform; and is it not important that this large number should receive some cultivation in the art of listening, and gaining an appreciation of what is good, true, and beautiful?

The relation of public-school music to the music of the church will next be considered. Does the quality of voice heard in most Sunday schools show that our endeavors to have the child use only his light head-voice in singing are bearing fruit? It would naturally be said that if the children have acquired the habit of using their voices correctly in school, they will not violate the laws of good tone production at any time. With the grade teacher in almost entire charge of the daily classroom work, we cannot be sure that the voices of the children are always used correctly, and we must have the co-operation of others who with us assist in the training of children. Where it is possible would it not be well for the supervisor to give some simple talks to those in charge of the Sunday schools in his town and illustrate with a class of children the quality of tone to be desired? I believe this would not only be of inestimable value to the Sunday-school children directly, but would bring us in a closer and better professional relation with choir trainers and musicians at large. Most of the latter are totally in ignorance of our work, and some have very little desire to be enlightened. The following instance may have been the experience of more than one. A choir director of one of the best boy-choirs in his city was given to speaking in a most disparaging way of the voices of the public-school boys who applied for membership in his choir, and believed, altho he was told to the contrary, that the children were encouraged to use the thick chest voice in singing in school. Not until he had the opportunity of hearing a chorus of four hundred boys sing under the direction of the supervisor was he convinced that both choir director and supervisor are working for the same end—good use of the voice.

With the same co-operative thought in mind it might be helpful to our cause to bring to the attention of mothers the knowledge of what we are striving for. The woman's musical clubs should here be of value to us. These organizations could furnish opportunities for the appearance of the supervisor and a chorus of children on club programs, and supervisor and

children might in turn receive help and inspiration thru the hearing of programs arranged by the club, especially for children.

Why do not choral clubs thrive in this country, as they do in England, Germany, and other European countries? Some have said because children do not learn to read music in our schools, and not having that power when they leave, they lack the desire to go into an organization, whether choir or choral club, and spend hours in the drudgery of learning the intervals and rhythms of a composition instead of spending that time in getting at the meaning of the composition and its interpretation. The large choral works with parts for children's voices are doing something for the choral music of the future in this country. Children who have taken part in the performance of a great work like Pierne's *Children's Crusade* or Handel's *Judas Maccabeus* have not only benefited much from the knowledge gained by studying the work, but the association with trained voices of men and women and a great orchestra will result in a desire on the children's part to become a permanent part of that organization when they have grown to manhood and womanhood.

It should be a matter of pride to us to know that in most cases where these oratorios have been given, the children were selected from the public school and their part of the work studied under the direction of the supervisor or special teacher of public-school music.

The relation of music in our schools to the orchestra is a very close relation indeed in some places. In cities and towns that do not support a large expensive symphony orchestra—and the number that do is small—the town orchestra or band must expect to get most of its recruits from the public school. A good professional player of a wind or brass instrument can only hope to make a living in one of the largest musical centers and this makes it necessary for the director of band or orchestra to get his players from those in his town who do not depend solely upon music for a livelihood. The experience that boys and girls gain in grammar and high schools by playing in the school orchestra make them not only ready and willing to associate themselves with the town orchestra but in some cases very valuable members of the latter organization. An orchestra in one of the towns of the Middle West contains thirty members who were and in some cases still are high-school pupils; and this is not an isolated case, but one of many.

The relation of the orchestra to the public school is also an interesting one, and in this connection a personal allusion may be pardoned. We have in St. Paul a symphony orchestra of seventy-eight musicians, and for the past three years concerts have been given by this orchestra for the public-school children, by which, for the nominal sum of 10 cents, the children could hear an orchestral program, especially arranged for them. The concert given for the children by the Symphony Orchestra this spring had in addition to the orchestral numbers another great treat: Mme. Schumann-

Heink gave her services for the concert and in her inimitable way sang herself into the hearts of seven thousand children and gave them a lesson they will never forget.

Music has a broader and deeper meaning in relation to the community than any we have yet touched upon—its relation to the individual and life of a people. Is not the training for an avocation in life as important as the training for vocation? The eight waking hours not spent in earning a living generally mean more toward the formation of character and good, upright living than the eight hours spent in the office, shop, or factory. Educators must recognize this and cultivate in the young a taste for good and pure enjoyment. The social nature of music is such that of all the arts it lends itself best to the enjoyment of the many: both performer and listener alike feel its influence and come under the spell of its power, and thru it are led to higher aspirations and nobler deeds. Music has become a necessity to man in his daily life, and as one of our university presidents lately said in reviewing the part that music plays in social, civic, and religious life—"a sweeping force in civilization."

SOME MISTAKES OF THE MUSIC TEACHER WHICH THE VIEWPOINT OF THE CHILD WOULD CORRECT

JULIA E. CRANE, NORMAL INSTITUTE OF MUSIC, POTSDAM, N.Y.

Is not Carlyle right when he says,

> The soldier wears openly, and even parades, his butchering tool; nowhere, far as I have traveled, did the schoolmaster make show of his instructing tool.

Where lies the blame that the profession of the teacher ranks the lowest among the learned professions, and, except in the eyes of the most discerning, has less dignity than the occupation of the farmer or the merchant?

Must we not blame ourselves that we have not so labored that communities should have discovered that

> fashioning the souls of a generation by knowledge can rank on a level with blowing their bodies to pieces by gunpowder; that with Generals and Field Marshals for killing, there should be world-honored Dignitaries, and were it possible, true God-ordained Priests for teaching.

It strikes me that Carlyle came near the root of the matter in this telling sentence, for when we view the work of the great teachers whom the world has loved to honor, we recognize that they were "God-ordained Priests for teaching."

Would there be any doubt of the dignity of the profession if all teachers were animated by the same spirit that gave Arnold of Rugby his world-wide fame? And what is this spirit but the spirit of humility, the "love that seeketh not her own"? Surely this spirit, understood and demonstrated, would long ago have given school teachers not only rank but power, a power born of the "love that never faileth."

But what, say you, has all this to do with the insignificant problems of the music teacher? I have stated this fundamental principle upon which all true teaching rests, because I am convinced that it is only by its application to our problems that even the minutest of them is correctly solved, and only as these are correctly solved do we merit the rank of "God-ordained Priests for teaching."

It is often noted that the "newly rich" show the most arrogant pride in wealth; the college Freshman is only exceeded in pride of learning by the first year high-school lad; and we as school music teachers, the newest accessions to the teaching force, are the surest of our methods, the most arrogant of our learning. The teachers of the three R's have seen too many changes in the methods of teaching to feel that the last word has been spoken for them, and with their humility comes the possibility of still greater progress. As we examine the various stages of development from the old alphabet method of teaching reading, thru the phonic, word, and sentence methods, down to the methods of the present day, we realize that it has been the teachers of sufficient humility and love to catch the mental processes of the child at his work, who have brought about these improvements.

Teachers are too much inclined to the adoption of fixed plans for presenting a subject, regardless of the fact that some children observe much and reason little, while others observe little and reason much. Then there are the preconceived notions of the mature mind from which all teachers suffer, but which have made the music teacher's path a remarkably thorny one.

It is of these things that I wish to speak particularly today, as I believe our work in the schools can never stand where it belongs until we rid ourselves of the false notions that our mature view of music and methods of teaching it has brought to us.

As you all know, music teachers for the schools have been drawn mainly from the ranks of the pianists, and while it is probable that a broadly educated pianist knows as much about music as any musician, what he knows is linked to the piano keyboard in a way that gives him views which are entirely false when applied to the teaching of singing. To illustrate: The addition of a sharp or flat to the signature entirely changes the fingering of the piano, and since this is true, the key of D to the piano student is more difficult than the key of C. This false idea dominated all the teachers and all the writers of school music books for many years. When Luther Whiting Mason, with his real sympathy for the children, saw that the pitch of the key of C was too low for young voices he introduced the key of G for the first lessons, but so convinced was he that key signatures would make trouble that he used only the first five tones of this key so as to avoid the F sharp. To be sure, music teachers and music books are today much more reasonable in this matter, but the fact that keys

should be selected for reading as well as for song singing with a view to the adaptation to the range of the child's voice is not as yet the basis upon which keys are always arranged in school songbooks. The truth of the matter is that to the singer one key is as easy as another, provided its range suits the voice, and to put a song in the key of C because a child is to sing it is the height of folly. The fact that songs are now being published in three or four different keys shows that composers are realizing that the singer will best interpret his song if he sing it in the key suited to his voice.

Many mistaken ideas are abroad regarding the song singing in the third and fourth grades. This is a time when unison singing should be at its best. But false notions regarding children's voices have stood in the way of the vocal skill which would make the singing of these years a foundation for much that is usually considered possible to artists only. I remember a kind but mistaken teacher of my youth who carefully omitted all embellishments in songs she taught me, because, as she said, I was too young to do such things. I grew up with the idea that a turn or a mordant, a rapid scale passage, or a succession of triplets was an impossible thing except as the result of years of practice, and it consequently took years of diligent work for me to gain flexibility of voice. This is entirely wrong, as a few simple experiments with the child-voice will prove. Children of the third, fourth, and fifth grades who have had the opportunity to sing every day in the natural range of the voice songs adapted to their needs will be in a condition to use the voice with the greatest agility. Roulades, cadenzas, and all embellishments are easily and accurately imitated, and the voice benefited by the practice. As soon as the voices are classified as soprano, alto, tenor, and bass, the singing must be done in the steady rhythm of a dignified chorus; but the unison singing of the grades should have the elasticity of a solo.

If the teacher is as ready to respond to the thought of the pupils as they are to hers, she will soon find that a freedom of execution and a refinement of expression that had not before been dreamed of characterize the singing. The possibilities in the way of artistic singing in these grades are practically limited only by the ideals and ability of the teacher. I have seen teachers of rare ability resting content with very meager results from a false notion that songs which require flexibility of voice and delicacy of shading are impossible for children.

Another serious error is the misconception regarding the danger of high tones. It would seem a simple thing for music teachers to have tried the children's voices and to have noticed in what range they were most natural and musical; but no, "high tones strain the voice" was the decision, and children were allowed to sing with a strident tone, a growl, or a whisper, when they might have sung as clearly as birds. I listened to an operetta, not many years ago, well written, attractive, well suited to

children in every other particular, but the choruses for the tiny tots were in a range far too low for their voices, and songs that a third higher would have rung clear and true thruout the hall fell breathy and flat at the footlights. So far as I have been able to discover, there are not more than three or four songbooks for primary grades as yet published in which the greater portion of the songs would not be far better if transposed from a second to a fourth higher than they now appear. The average child, from six to ten years of age, has a high, light, flexible, floating tone. The right kind of singing in kindergarten, first, and second grades brings, in the third and fourth grades, a tone of crystal clearness, with increased breadth and power. Many children who speak in a coarse and heavy voice are found to possess the pure, high, singing voice, and soon gain freedom in the use of it.

One of the most serious obstacles to the proper development of the singing voice is the mistaken notion among parents and teachers that a boy's voice is of lower pitch than a girl's; that boys' voices are naturally rough and coarse. Quite the opposite is true: boys' voices are high, clear, and pure, and sound more like the voices of women than girls. The custom of putting the boys on the alto part is most pernicious and only encourages a mistaken sense which should be eradicated. Here again a discriminating teacher will see that the boy claims that he cannot sing high, not because high singing is difficult or distasteful to him, but because he does not wish to sing like a girl. Now a boy never sings like a girl, his real voice is a boy's voice, not a girl's, a woman's, or a man's. It is a distinctively characteristic voice; no one else has it, no one else can imitate it. And a valuable voice it is, a voice that should be cherished as a rare and beautiful gift; for even the boy himself is not allowed to keep it many years, as it soon drops an octave, and becomes a man's voice. The boy who is made to realize the treasure he possesses takes pride in his voice, and is no longer tempted to assume a manly quality before he arrives at man's estate.

Some years ago a teacher reported that the boys in the sixth grade were refusing to sing high. I visited the class and found not a boy willing to try a tone above the two-lined C. I went to the seventh grade, and there were several boys who could sing high C and one who went easily to the E above it. In the eighth grade, I found boys with beautiful high C's, and I returned to the sixth grade to report my discoveries. The instantaneous change of front was amusing, for if eighth-grade boys sang high C, it certainly was not unmanly for a sixth-grade boy to be caught doing it, and sure enough, every boy in the grade had a high voice. Of course this is not always true, because boys of more maturity are sometimes found in the lower grades, and the voice does not wait for the child to acquire skill in arithmetic or English, but marches steadily forward, especially when singing is a daily exercise.

So here again the teacher must be guided by the child, not by his

mistaken ideas, but by the real nature of his voice, sympathizing with his fears and prejudices only to the extent necessary to rid him of them.

Then there is another critical period in the development of the boy's voice, a time when the formerly wise precaution, "Sing softly," works harm instead of good, and this is during the first few months after the bass voice appears. This voice is sometimes lower in pitch, and heavier in volume than it may ever be again. Watch the lad carefully, and it becomes evident that while he must not be allowed to force his voice, too much restraint cramps the throat muscles and produces a tone so fundamentally wrong that the boy naturally rebels against it. It feels hard and tight and allows no freedom or spontaneity. Boys are very self-conscious at this time—as who would not be with a big new voice as surprising to one's self as to the listener? The constant "Hush!" from the music teacher often results in shutting off a really fine voice, or in forming habits of muscular tension that require years of training to overcome.

But are girls, too, mistakenly dealt with? As a rule, no; which accounts for the fact that little complaint is made of the girls in a music class, while the boy problem is always up for discussion. One thing, however, needs more attention than it receives, and that is the fact that at the time when boys' voices are the strongest, girls' are the weakest. If the girls and boys are evenly divided as to numbers, this makes a serious problem for seventh and eighth grades and the first year in the high school. While there are interesting part-songs for the girls, there is nothing that the boys with changed voices can do alone. If the class contains a sufficient number of boys with unchanged voices, the solution is a simple one as all parts will be taken by boy sopranos, altos, and basses. The very narrow range of the boy-voice during the mutation period, and its very low range just after the change, prohibit part-singing for them, and unison singing is most uninteresting after a taste of beautiful harmony in the previous grades. Just one other plan is possible. If young women with mature voices can be found to sing with these boys for a few months, they will be able to sing out freely on the bass part, and will enjoy the music thus made available. This suggestion is meant for classes in sight-singing, as the boys have the problem of learning to read the bass and tenor parts, and altho it is not a difficult one under proper conditions, it is not easy to secure these conditions. Failure in this will leave the boys singing the air an octave lower, and hinder the one step in their progress which at this crucial moment gives dignity and meaning to the work.

In the chorus work of the upper grades and high school, if the boys and girls are about the same age, it will take forty altos and sopranos to balance ten basses and the one or two tenors hat may be found.

Because music is pleasing to the ear and singing an enjoyable exercise, rote singing has often been the beginning, the means, and the end of all music taught in the public schools

If rote singing has any place in the course of study why does it not serve the entire purpose of school music? There are many valid answers to this question, but the one which applies the most directly to the topic under discussion is this: The rote process of teaching soon becomes uninteresting and even obnoxious to the children themselves. In the kindergarten and first grade rote singing proves itself a delightful and satisfactory activity, as well as a necessary foundation for a later study of music; but anyone who has had experience in teaching songs by rote in the grades above the second knows that a teacher must have great skill and the opportunity to present the songs in public in order to hold the interest; unless children recognize increase of power as a result of their labors they demand an immediate market for the product. Even tho semblance of peace is gained with the children thru skillful teaching and numerous public exhibitions, far greater interest is developed thru such methods of teaching music as those which are now proving effectual in the teaching of reading. These methods recognize that the highest joy is the result of the successful achievement of a worthy purpose. Note the number of promises recorded in the Good Book for "him that overcometh." What blind leaders we have been that we should dare hope for results while ignoring so basic a principle!

The work of the music supervisor and the methods he employs are not, then, of small consequence. He who is content to lift his pupils with his own strength over every obstacle which they encounter is encouraging habits of indolence and weakness which must work harm in every avenue of their lives.

It requires a very skillful teacher to draw the line wisely between the help which really puts the pupil in a position to help himself and that which weakens and debases. The music class, if properly conducted, calls for attention and concentration of mind beyond that of any other piece of work done in the elementary schools, and because these mental activities are so necessary to the highest results of study in any line, music may be made greatly to help or hinder the development of right mental habits.

The music teacher must be more clear-sighted than most teachers to recognize the help that hinders, because the very repetition of melody which is so important to the unmusical child gives the pupil with quick ear and good memory help enough to make it unnecessary for him to pay the slightest attention. Many a musical child goes thru the entire course of his school life with high credit for his work in music without exercising any power higher than that of the parrot.

In the discussions of the methods of teaching music, it is sometimes made to appear that to give a child the power to carry his own part independently and the use of musical terms in which to clothe his thoughts about music is to deprive him of the finer qualities which it seems the peculiar province of music to develop. But nothing could be wider from the

mark; in fact, the broader view of music adds to artistic excellence rather than detracts from it. That the music teacher may be so poor in her power of presenting the subject that pupils become antagonistic toward it is too often the case, but this is as often true of the teacher who works for artistic results only as of the one who neglects the artistic in exaggerating the importance of the technical. The proper balance between the artistic and the technical in music teaching is like the golden mean in all things, seemingly difficult to attain.

A real study of the child brings out the fact that there is a time in his life when learning to decipher musical notation is a real joy. At this time gaining familiarity with the symbols of music and acquiring musical terminology are more pleasant tasks than committing songs to memory. To do this work early gives the child the technical skill which should accompany his advancing taste, and forestalls the opposition which is seen the country over in high schools, where students, unable to read music, scorn that which they are capable of performing. A little more technical skill enables them to conquer the difficulties in a grade of music which meets the demands of their cultivated tastes, and then the high-school music is a delight to all who take part either as performers or as listeners.

We see, first, that the preconceived notions of the adult musician create difficulties for the child, making him fearful of many things that in themselves would cause him no trouble—as key signatures, modulation, accidentals, compound measure, high tones, rapid execution; second, that young voices are high, and songs of a low range cause a strident or breathy quality of tone; third, that flexibility and freedom of execution are the natural heritage of the child, and to omit all embellishments from music for the child is like depriving him of the bicycle because it requires agility of movement; fourth, that until the voice begins to change, boys have high, clear, voices which are best developed thru songs of a wide range; fifth, that boys should sing thru the mutation period with much care that the compass used be only that which is easy, and that the tone be free, even at the expense of being noisy; and sixth, that proper balance of the technical and the artistic in music teaching awakens interest, lays a broad foundation for future study, and furnishes just the elements needed in an ideal course of study.

Shall we not concede, then, that the important thing is so to teach that each day gives the student greater power to solve his own problems, and that whether we hear entrancing music in the school-room is of far less moment than that the music teaching be one of the forces that adds to the upbuilding of character? If this work is so planned that at each step the power, ability, and taste of the child are considered in their relation to his highest development, music must take its place as a vital factor in education.

DISCUSSION

VICTORINE HARTLEY, supervisor of music, Berkeley, Cal.—We, as supervisors of music, have not been dictatorial enough in demanding the place where our subject belongs in the regular school curriculum—in the heart and soul of every child and student from the kindergarten thru the university. We are too willing to take the scraps of time, the tag ends; willing, ready, and happy to be the sandwiches.

As to where the blame lies that the profession of teaching ranks the lowest amongst the learned professions: that lies with the teachers themselves. I firmly believe that I, as a teacher, have the second-highest calling—that next the mother. With this feeling toward our work and with our subject—what a power to lead each child to its best!

I believe that Miss Crane is right when she says we must forget selves and become humble, and go into our work with the "love that never faileth." No child will love his work, be willing to work in it and for it, be interested in it, if he does not realize that love is there.

With this love of the child, we must understand him, and reach him from his viewpoint; and with our "mature views" tucked away for mature people, we will have a power which no other in the community has.

In regard to a fixed plan for presenting a subject, no truly successful teacher ever does the same thing twice in the same way if she makes a study of her children and the conditions which surround them. There is, however, a right and a wrong way, and, too often to the child's detriment, no way at all. There should be a general plan reaching the child thru as many avenues as he has. A child likes system, he likes to see a development and a growth; he does not like things at sixes and sevens, and he has no respect for the teacher who is lacking in these things; hence, he has no respect for the subject.

As to the preparation on the part of a music teacher—this is the most serious problem in our work. Coming from the ranks of piano and voice teachers who have not had school experience, much harm has been done. It is true she should have broad information on the subject and the detail at her command, but a supervisor must be able to work with the individual—not alone altogether—but with the mass.

I heartily coincide with what Miss Crane says on the child voice. Let it be natural. No set of instructions can be followed, but each child's voice must be constantly and carefully watched. If the teacher has love, tact, knows her subject and her children, each boy and girl will be singing as he or she should, with correct quality. We agree that songs should be taught first, last, and always; that these should consist of the best of all there is. This list should include those that stir the emotions, teach lessons of patriotism, valor, love of nature and the beautiful; should consist of beautiful and true melodies and harmonies. The child expects an education thru song, and to sing these songs mechanically and in a dead way—any child will rightfully refuse.

To me the technique or the mechanics of music must go hand in hand with the song. It is a fact, and a sad fact (as stated by Miss Crane) that some school music consists only in singing songs. The aim in teaching music is not that the child is to be amused. He demands his tools, and they can be given him without drudgery. Again, the personality and tact of the teacher must be present. The public school must fit its children for life, or better, help them to "fit themselves." Are we making artists? Is that our aim? No, we wish to make men and women who are able to take their places in the world. It makes no difference what that future is musically, we must give him his "tools." If he is to become an artist—well and good; a soloist, member of a choir, club, chorus, glee-club; he may wish only to sit on the bleachers and sing "All Hail the Blue and Gold"; perhaps it is to "join in" around the campfire or fireside; but let us give him the "tools." It may be he will only sing to himself or herself as he follows his plow, drives his horse, sits at his desk. sweeps the floor, or washes

dishes; still we must give the tools. The mechanical appeals to certain natures and to all children at certain ages. They like to decipher, they love the history of things —the why of things. I have seen boys changed from incorrigible, surly fellows thru the study of minor scales.

REPORT OF COMMITTEE ON TERMINOLOGY

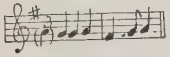
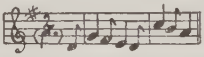
To the members of the Department of Music Education of the National Education Association:

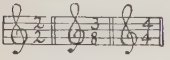
At the closing session of the Department of Music Education last July, it was voted to refer matter of actual terminology, needed to cover the adoption and use of a measure-sign consisting of a numeral above the third line of the staff and a quarter-note or a dotted quarter-note below, to the Committee on Terminology to report at the next meeting. Following is the report of the committee:

Arabic numerals, either 2, 3, 4, 5, 6, 9, or 12, placed on the staff directly after the signature and above the third line, show the number of beats in a measure.

A note, either a quarter or a dotted quarter, placed in parenthesis under the numeral, represents the length of one beat and is called the *beat-note.*

The numeral and the beat-note thus grouped constitute the *measure-sign.*

Illustrative statements covering proper terminology: The tune "America"  is written in *three-quarter measure.* The chorus "How lovely are the Messengers," is written in *two-dotted-quarter measure.* 

The above forms of statement were adopted at Denver in 1909, and are recommended for general use when speaking of music written with the conventional measure-signs: etc.

In place of "two-two time, three-eight time, four-four time," say as above: "The piece is written in *two-half measure, three-eighth measure, four-quarter measure.*"

Double-sharp and double-flat.—The following items concerning the double-sharp and double-flat adopted at Denver contrary to the report of the committee were referred back again:

3*c* The double-sharp is a character which causes a staff degree to represent a pitch two chromatic half-steps higher.

3*d* The double-flat is a character which causes a staff degree to represent a pitch two chromatic half-steps lower.

The committee resubmits that portion of the Denver report in its original form as follows:

3*c* The double-sharp is a character which causes a sharped staff degree to represent a pitch one half-step higher.

3*d* The double-flat is a character which causes a flatted staff degree to represent a pitch one half-step lower.

Concerning minor scales the committee reports as follows:

Primitive Minor (*ascending*).—The minor-scale form having minor sixth and minor seventh above tonic to be called *Primitive Minor.* Illustrative examples: A minor: a, b, c, d, e, f, g, a; C minor: c, d, e flat, f, g, a flat, b flat, c.

Primitive Minor (*descending*).—Same pitches in reverse order.

Harmonic Minor (*ascending*).—The minor-scale form having minor sixth and major seventh above tonic to be called *Harmonic Minor.* Illustrative examples: A minor: a, b, c, d, e, f, g sharp, a; C minor: c, d, e flat, f, g, a flat, b, c.

Harmonic Minor (*descending*).—Same pitches in reverse order.

Melodic Minor (*ascending*).—The minor-scale form having major sixth and major seventh above tonic to be called *Melodic Minor*. Illustrative examples: A minor: a, b, c, d, e, f sharp, g sharp, a; C minor: c, d, e flat, f, g, a, b, c.

Melodic Minor (*descending*).—Same as the *Primitive*.

Other matters referred to the committee at the Boston meeting are as follows: "It was voted that the matter of terminology as to use of words 'pulse,' 'beat,' 'after-beat,' and 'half-beat' be referred to the Committee on Terminology."—Volume of *Proceedings*.

After considerable correspondence both within the committee and outside, it seems best to ask of the Department of Music Education more time for consideration.

Respectfully submitted,

CHARLES I. RICE, *Chairman*
P. C. HAYDEN
WM. B. KINNEAR
LEO R. LEWIS
CONSTANCE BARLOW-SMITH

MUSIC IN THE COLLEGE

ARTHUR FOOTE, COMPOSER, BOSTON, MASS.

The question of music as a part of the regular college curriculum brings us back, sooner or later, to a consideration of the preliminary training given in preparatory schools; for that reason it is well to speak of the matter here. Forty years ago music was hardly thought of by most people as forming a possible part of real education, at least for boys; and, in spite of the stimulus that had been given to our musical training thru singing schools by Lowell Mason and others, music in primary, grammar, and high schools was then generally limited to rough-and-ready singing by rote, if indeed there were singing at all. So far as men's colleges were concerned, music showed itself only thru undergraduate glee-clubs, and occasional small orchestras. But the beginning of better things was at hand; for in 1869 John K. Paine delivered a course of lectures at Harvard, within a few years becoming professor of music there; while in 1875 Hugh A. Clarke was appointed to a similar post at the University of Pennsylvania. These two events are significant in connection with the study of music in colleges upon an academic basis; by which I mean the study of the theory of music in complete form as, e.g., mathematics and Latin are studied. Altho college authorities have been, and still are, slow in admitting music to the curriculum, and in spite of the fact that, in the minds of many, it is still on probation and must justify itself as a significant part of education, remarkably good progress has been made. So many colleges and universities have followed the lead given that it will not be long before one without a musical department will be the marked exception.

Colleges may be divided into two classes as regards the sort of musical instruction given: (1) those in which theoretical study is combined with what are called "practical" or "applied" music courses; and (2) those in which the work done is confined to the theory and history of music. (By

practical courses are meant those in which instruction in piano-, organ-, violin-playing, etc., and singing are given.) In some colleges of the first class practical courses predominate to such an extent that we have really a conservatory in combination with a college, while in others they have less prominence. In institutions remote from large cities this arrangement must be regarded as natural and appropriate, for the playing and singing side could not otherwise be taken care of. Such colleges are, and will be, more numerous than those of the other sort, in which only theoretical music study is pursued. These latter will be of necessity small in number, and restricted to such as are in or near musical centers, such as New York, Boston, Chicago. Of women's colleges it is probable that in the future, as now, the great majority will lay some stress upon the practical courses, while giving due attention to theory and history.

There is also a great deal of attention now being paid in all these colleges (both for men and women), to courses that simply help toward cultivation and a general understanding of music by those who may even neither sing nor play. Such are appropriately called "appreciation" courses; by them students are intended to get a knowledge of the history and development of music, of musical form, and perhaps something of harmony; music is played to them, described, and analyzed. (It may be remarked that the mechanical piano players have proved of great service.) In these ways many young people are given their first intelligent conception of music, and learn to regard it as something of an intellectual, as well as emotional and sensuous nature. There can be no question of the value of such instruction for the average student who "likes" music, and who needs to be guided toward the liking of it with intelligence. These courses demand as high a degree of pedagogic skill as the more abstruse, higher, theoretical branches, as well as cleverness and tact; it is encouraging to see how successful and fruitful they can be made.

It will illustrate fairly well just how we stand on the general question if we take two typical sets of courses actually offered last year—the first in a college where "applied" music is necessarily made a part of the scheme, which is as follows: harmony, counterpoint, form and composition, history of music, piano playing, and choral culture. Credits are given toward a degree for all of these, and they are open to Juniors and Seniors. The second set is offered in a college situated practically at one of the musical centers, for which reason no courses in playing or singing are needed. We have harmony, advanced harmony, counterpoint, canon and fugue, free composition, history, appreciation, for each of which credit is given toward the degree; the simpler subjects are intended to be taken by Freshmen, and the others subsequently in their order in the following years; degrees *cum laude* and *summa cum laude* are given for music as a separate study. A number of students of this second college have gone successfully into music as a profession, largely because of the opportunity which they had

there to begin to fit themselves for such a career, and to learn whether their abilities justified such a course.

These colleges are but two out of many where well-directed work is being done—a remarkable exhibition of growth during the last generation. While these two are for men only, the same thing is true as regards those for women, and those for both men and women. Indeed, it is quite possible that, in the future, co-educational institutions will go ahead of the others; those which are supported by the state will be able to offer such inducements as will bring to them the leaders in musical education from everywhere.

An additional fine feature exists in most colleges in the student choruses, many of which attain a high degree of excellence, while in some cases there are also orchestras of students.

The general condition is fairly well shown by a quotation from the report made by a committee of the Eastern Educational Music Conference, in 1910, altho this investigation confined itself to New England, New York, and New Jersey, and in so far is incomplete. Of forty-seven colleges, about one-half grant credit for the study of music leading to the degree of A.B.; nine of them grant credit in entrance examinations, the percentage of credit varying from .07 to .15. About 125 students have received such credits, and the same number have failed—a fact showing that the requirements are not small. While we have the other 50 per cent of colleges that do not encourage music, the preceding statement shows great progress in the right direction.

All that has been thus far spoken of is very encouraging to those of us who are watching the healthy, normal growth of music as a part of our national life; but there is one depressing thing that we find: as in other branches of education, our national defect of lack of thoroness in fundamentals, and in early training, forces itself upon the attention. The great difficulty that confronts teachers of music in colleges results from superficial early work. Just as piano teachers will tell you of pupils who come to them for advanced instruction but are unable to tell a minor chord from a major one by hearing, so in colleges we find a great many students entirely unable to hear music with any intelligence.

And this brings us to the intimate connection of the college and the preparatory, or high school. The lack of training referred to need not exist; I have in my mind high schools in New England of which the pupils have given music like Haydn's oratorio of the *Creation*, Mendelssohn's *Hymn of Praise*, Gade's *Crusaders*, and there are, of course, such scattered thruout the country. But as a rule the teaching of music in schools leaves much to be desired.

It is, however, a simple thing for a competent instructor to teach high-school pupils thoroly and fundamentally up to a satisfactory point. The method should be about as follows: first of all, pupils to sing intervals

(with knowledge of what intervals they are singing, e.g., major thirds, minor sevenths), this being done without reading notes, and in fact before notes are used at all. Then they should practice singing intervals from notes; this first work must progress by small degrees, and with the greatest thoroness. It is the most important thing of all, and will take more time than an average teacher will think of putting into it; the interest of the pupils must be kept alive by the occasional introduction of a pretty song, even if sung by rote. The next step will be reading simple melodies at sight, and the practice of little songs in two parts; finally songs in three or even four parts can be read and practiced. Reading intervals and melodies at sight ought to be kept up as a daily exercise, while the difficulty of the songs can be increased more quickly than would seem possible to one who had not seen the work that is really done in our best schools. The principles of modulation should be taught, and the simpler things in harmony, such as triads and their inversions, seventh chords, etc. The basic thing is that pupils should hear with their eyes, i.e., get musical concepts from the written note, and see with their ears, making mental pictures of the intervals sung. A recent investigation of the present status of high-school music in New York, New Jersey, and New England showed eighteen schools offering courses in harmony.

The experiment has been made of including piano-playing, etc., in the high-school musical course, and with some success; so radical a step as this must, of course, justify itself, and one cannot come to a definite conclusion from the small number of instances at hand.

Training in singing, however—the easiest, most attractive, and best introduction to music that girls and boys can have—ought to be included as an essential part of every high-school course of study; and it should be substantially on the lines indicated, for so pupils would at least know thoroly what they were expected to know.

Inasmuch as colleges are coming to include music, i.e., harmony, and even counterpoint, among subjects offered at the entrance examinations, it is of vital importance to them that the average training in preparatory schools be better than it has so far proved to be, the alternative being a lowering of the standard for entrance; and to the great majority of high-school pupils, for whom the school represents the highest point in their education, it is of even greater consequence. Music, as one of the humanities, should be offered to every child; to teach it well simply requires the same sort of ability as does the teaching of other subjects; while the common-sense way of going to work is so obvious that there is no excuse for the state of things too often found, unless it be an excuse that parents and school committees neither realize the value of musical training nor the importance of having the best equipped teachers possible.

DISCUSSION

FREDERICK E. CHAPMAN, director of music, Cambridge, Mass.—The interesting paper to which we have listened appeals to me particularly, because I think Cambridge, Mass., where I have taught for many years, was the first city in the United States to introduce harmony and counterpoint into the high-school course.

At first it was not considered a major subject, but it was particularly beneficial to such students as contemplated a normal course. This, I think, was in the year 1899.

The next year, in consultation with the late Professor John K. Paine, then professor of music in Harvard College, we determined to ask the college authorities to accept harmony and counterpoint as subjects for which credit would be allowed in an entrance examination.

Two years later the privilege was granted, and since then several universities and colleges have followed the example.

Two points for each subject are allowed, and the studies may be taken in place of various subjects counting the same number of points, single or in combination.

It is not uncommon today to find harmony, counterpoint, musical history, and appreciation among the subjects in the curriculum of many high schools thruout the country.

Mr. Foote says, "The great difficulty that confronts teachers of music in colleges results from superficial early work"; and later he says, "the lack of preparation referred to need not exist."

If this is the case, I can see two reasons why it would be true: First, the amount of time devoted to the study of music in the public schools today is insufficient to accomplish the work required in college-entrance examinations—an average of fifteen minutes a day for ten months, approximating about forty or fifty hours a year. Secondly, the ambitious instructor of music in the high school, who wishes to have his pupils elect music as one of the courses, with the prospect of using it in an entrance examination to college, consults the latest college requirements in music, and, while he is surprised at the scope of the examinations, nevertheless he bends his energies, "hitches his wagon to a star," with the result that he cannot reach the goal, because of the profound requirements and insufficient time for teaching on the one hand, and immature minds with which he is dealing on the other.

Do we forget that the average age of the pupils entering the high schools today is much less than when we entered the high school?

Mental growth, as a rule, does not run races with the physical; they go along together today as in the days of our forefathers, however much educators would have it otherwise. An "enrichment of courses" has been, and still is possible, but the heights will never be reached at a bound.

On my recent visits to some of the well-known universities and colleges from Massachusetts to Lower California, I find that, where music forms a conspicuous part of the courses of study, the requirements seem to me to be beyond the possibility of the average high-school pupil to acquire in so short a time as is allowed for music study in the secondary schools. And when I asked how many pupils elected music with the anticipation of following the course in college, the instructors have invariably said:

> The requirements for entrance examinations are beyond the capacity of the average high-school pupil, and he naturally shrinks from attempting what he feels he cannot accomplish; therefore the classes are small.

The high-school music teachers, of course, do not wish to be considered superficial, yet their pride and ambition is to place in their course an outline that will appear to the instructors in college as calculated to meet their entrance requirements. They admit it is pretentious, but in most cases it attempts only to cover what is required by the college.

Referring to high schools in New England which have given Haydn's *Creation*, Mendelssohn's *Hymn of Praise*, Gade's *Crusaders*, etc., I am convinced after hearing school children attempt to sing these compositions and others of the same caliber, that while it is possible and advantageous in some respects to have excerpts from these masterworks studied by pupils of the modern high-school age, the works as a whole should rather be heard than attempted by the school chorus. This is not impossible, as adults' choruses which render such works are common.

There are obvious reasons why high-school choruses should not sing such works, one because of the voice limitations of the pupils of the high-school age, another because these compositions were not conceived by the composers for immature voices, and therefore an adequate performance is not possible under such circumstances.

I quite agree with Mr. Foote that "It is a simple thing for a competent instructor to teach high-school pupils thoroly and fundamentally up to a satisfactory point," and there comes the rub—what *is* a "satisfactory point"?

From my experience in attempting to prepare classes to pass successfully the college-entrance examinations in harmony and counterpoint, I would limit the instruction to a study of harmony thru the dominant-seventh chord and its inversions; to the ability to harmonize melodies with the use of these chords; in counterpoint, to a thoro understanding of how to use the first four orders in single counterpoint.

I feel confident that this much is possible within the time limit now allowed, and to these two subjects can be added musical history and appreciation with the usual chorus singing, orchestral and glee-club rehearsals being held outside of school hours.

Under present conditions I believe no more should be attempted, and to this end the instructors of music in the universities and colleges should so modify their entrance requirements in music as to meet these conditions.

Teachers of music in colleges and secondary schools should reach an understanding on this matter, and then, with a comprehensive course outlined for both institutions—college and high school—a saner and more feasible plan will prevail.

THE RELATION OF MUSIC TO SCHOOL ACTIVITIES

IDA M. FISHER, DIRECTOR OF MUSIC, STATE NORMAL SCHOOL, SAN JOSÉ, CAL.

Music represents life instincts. It is a natural expression of human feeling and activity. Joy, the strongest life-giving emotion, can be no better expressed than thru the medium of song. The little child naturally sings when he is happy. This instinct of song is in him tho often very imperfect. It can be brought out if his sensibilities are touched. It is our duty to train this emotion so that he may have the higher mode of expressing his feelings.

Education has too much neglected those things which lead to the cultivation of the emotional instincts. The highest function of emotion is to stimulate thought which shall develop ideals—ideals which make us long for the world to be better and more beautiful. There is no one who has ever fully participated in or listened to good music but has felt this longing. Music in its very nature is an inspiration for higher and better things. Thru its medium the feelings may be expressed more clearly than in any other way. The loftier and profounder the feeling, the higher the class of music required to give it expression. A person without deep emotions

in life is satisfied with a dime novel or a coon song; but as his life develops his character and broadens his sensibilities, he is better able to understand Shakespeare and Beethoven.

The advancement of civilization depends upon the growth of the Christian ideal of the brotherhood of man. Poetry and music have developed out of the effort to express this common feeling. It therefore devolves upon us as teachers to cultivate this manifestation of feeling in order that the individual may get not only the highest enjoyment out of life for himself, but that he may also feel it his duty toward his fellow-men to assist in making the world better, thereby aiding his brethren in leading truer and deeper lives.

Chorus-singing gives this inspiration as nothing else does. There is something unexplainable which takes possession of and forces one who at first seemed indifferent, to yield to this influence and to join with the others. Before he realizes, he is enjoying himself and finds that he is doing his part in producing something beautiful, and he soon accepts it as a pleasant duty and listens with enjoyment to the delightful harmonies which result from the united efforts of all. After repeated attempts he finds that he, like the rest, has this power of song and by being encouraged to continue finds his own taste and power stimulated and developed. Many beautiful voices are discovered that might never be heard if not given this opportunity to sing with others, thus overcoming that natural timidity which often prevents their attempting it if compelled to sing alone.

A good chorus composed of a whole assemblage which sings at regular periods, daily, if possible, is necessary to every school whether large or small, primary or advanced. This is the time when all can join in one sentiment. Thru the singing of beautiful songs expressing thought common to all the school becomes unified and the school spirit intensified. Loyalty to any school is strengthened by school spirit and anything that strengthens this spirit, which cultivates a love for one's alma mater, is worthy of our most careful and systematic consideration.

Too much care cannot be taken in the selection of songs. One should consider the ability of the average pupil and choose accordingly. The more talented ones will enjoy singing easy songs and those less talented will be more willing to attempt to sing if given songs not too difficult. These songs should possess the spirit of broad sentiment. In our cosmopolitan country the people necessarily believe in a great variety of creeds, and there cannot be good, hearty singing if even a few resent the sentiment expressed. All should unite with a harmony of thought in order to produce the right effect. I have noticed, in many schools, songs given for chorus that might well be sung in church, but not broad enough to appeal to the school composed of all denominations. School songs should also manifest a great variety of sentiment, should body forth all the healthy moods, in order properly to bring about the training of the different emo-

tions. Select the songs carefully for each day's program. Let the first be one that will add to the joy of living, then a prayer for guidance thru the day; and for closing, one of a miscellaneous character.

At present, when we have access to such an abundance of good song material, there is no excuse for giving anything but the best both in musical construction and thought. Every song should be selected for some definite purpose, either to strengthen a sentiment, or to train for the appreciation of some musical composition. This will eventually raise the standard of music, for when the mass enjoys the good they will demand it and discard the poor. Why is the music given to the public in Germany, Italy, and other foreign countries of the best? Because that is the only kind accepted. The people demand it. They have no taste for the commonplace, since they have been trained from childhood, even generations back. What a pity that music typical of our country should be represented by the rag or the coon song. It is a grave injustice to our composers and singers, but will continue to be so until our work is effective and changes the drift of public sentiment toward our music.

It therefore seems to me that the greatest duty before us is to uplift the standard of American music. We can do it, it is not impossible if we go about it in the right way; that is, train our boys and girls to appreciate the good and accept but the best. This is the only way by which we can reach the high ideal toward which we as supervisors and teachers are striving.

From this chorus are developed such organizations as chorals, glees, and orchestras, which give an opportunity to those specially talented and interested to devote extra time to this subject. At the start it is well to accept whatever talent presents itself and work from that as a point of beginning. One need not become discouraged if conditions are not perfectly satisfactory at first, for they will improve and the clubs will grow as interest increases. These organizations assist greatly in assembly by producing cantatas, chorals, selections from oratorios, or any composition too difficult for the large chorus. They help to elevate the music in every way, aid in creating an incentive to higher aspirations in those less gifted, also train and develop the talent in those belonging.

Music is very closely related to all school activities. Take it away from physical culture and it is like removing the framework from a house. The incentive is gone. Watch the child on the playground and see how he enters the game—with his whole heart and soul; he forgets himself completely and participates for the joy there is in it. Have you forgotten how often and how much you loved to play "Jolly Miller," or "London Bridge," and how heartily you sang? What a child gets from the joy of getting becomes a part of him—he never forgets it. The folk-songs and folk-dances which have sprung from the common people have charm in their very simplicity and naturally appeal to the mass. Here the teacher gets

close to the instincts of the people. This class of music has a great mission toward inspiring people to sing.

An annual flower fête in May is a beautiful custom of any school. This can be a general exhibition of the games, dances, and songs, and should be a matter of development thruout the year. As the giant Sequoia up in the Sierras begins its life in a tiny seed, so our May Fête of San José State Normal and Training School began with the kindergarten babies in an expression of the happiness of springtime and flowers, and has grown during the ten years since its start into one of gigantic proportions. It now includes all the departments from kindergarten on thru primary, intermediate, grammar grades, normal students, and faculty, and is undoubtedly considered one of the most beautiful things which California can show. This follows in a way the old English May Day.

At least a month before the event the queen is chosen by the children from among the pupils of the upper grammar grades. The fact is impressed upon their minds that their choice must not be governed by beauty alone, but also by such qualities as kindness, gentleness, and dignity which become any gracious ruler.

A beautiful California May Day, the canopy of blue above which rivals any blue of the skies of Italy, a background of trees, a little world of grass and flowers, inclosed by garlanded bowers, tiers of seats with thousands of spectators reminding one of the old Greek theaters, or the old Roman Coliseum, gives some idea of the picture of the arena in which this pageant is to be enacted. The faculty first enter and take their places in a booth prepared for them. Then the line-up and march of 700 normal students, garbed in white with wreaths and garlands of yellow and white, their school colors. When all are in position, they burst forth with one grand paean of welcome in "May Morning."

Then the several departments of the training school enter, each to a different fancy step, they also in white and decorated with wreaths and garlands, increasing in strength of color, from the baby blue and white of the kindergarten on thru the delicate tints of pink, lavender, and yellow to the bright crimson of the seventh and eighth grades. Now all is in readiness for the great event, the entrance of the queen. In her chariot of white roses, drawn by six boys wreathed and garlanded in the crimson of her department, she makes her approach as all rise and sing "Greeting to the Queen," and at a signal, shower her with flowers.

After the coronation of the queen, all to song by over a thousand fresh, young voices, in which they vow their allegiance and faithfulness, she begins her rule by signaling for the games to begin. There are games a plenty, quaint little folk-dances, beautiful flower drills, an idealized Grecian ball game, a chariot race, all so spontaneous and with such grace of motion that one would hardly guess a guiding hand had ever taught them. The mind can scarcely conceive of a more beautiful picture.

The words of the old songs ring over the inclosure and the singers seem to forget themselves in their parts. The chorus of 700 girls sings with the students for all the games. This lends strength to the rendering and makes it possible for the words to be heard.

The spectators revive the memories of their childhood in witnessing the happiness it gives the children. The spirit of joy and love of the beautiful reaches its height when all departments join in singing and dancing "The Looby Loo." Then, for a climax, the Queen descends from her throne and leads all in the May Pole Dance, when there are five May poles with ribbons flying and children singing and dancing, all happy in taking part in this innocent, healthy pleasure. Thus the exercise closes with the aim of leaving with the children the most beautiful memory possible.

It remains for me to discuss briefly one of the phases of our work, usually the most neglected of all. I refer to that of invention or composition. There should be more opportunities given the student whereby this talent could be developed. One I would suggest takes the form of a school contest in the writing of original songs. This naturally falls into two divisions: what we choose to call "jolly-up" songs and "school songs." The first-named are necessary and give great pleasure to the students. If encouraged and guided by the supervisor, they will arrange many clever ones that can be used in games and debates and general jollification meetings. These songs aid as nothing else can to spur on those taking part to greater effort and often to victory. The second-named, "school songs," will be of a more dignified class and of greater value to the school. A loving-cup was recently given our school by two of the alumni members to encourage school activities. Amongst other contests between the Juniors and Seniors was one for a school song. While ours is not a school of music, nor can there much time be given to the individual, yet the result was very gratifying. From this incentive our students composed all the songs for Junior-Senior Day commencement week.

This beautiful symbolic ceremony which embodied the Junior farewell to the Seniors was given in the Normal Quadrangle. The Juniors entered from the corridors to a processional song, bearing garlands of white and yellow flowers (symbolic of school spirit) and laurel (signifying honors to the Seniors) and outlining the broad walks, formed a guard of honor, thru which Alma Mater and her nine muses passed to a dais at the entrance of the Quad. Summoned by Alma Mater, groups of students, representing the different departments of the normal, in turn entered, each bearing the floral offering symbolic of the course portrayed, and laid it at her feet. After each department, with appropriate song and fancy dance or drill, had responded to Alma Mater's call, the Seniors came slowly, singing their song, and facing Alma Mater stood quietly a moment, then all bent in a silent salute. Turning, they retraced their steps, followed by Alma Mater, her attendants, and lastly the Juniors, all singing their recessional.

When the whole school jointly sings well, the song becomes a vitalizing spirit and gives an opportunity for visitors to measure the character of the school and is a clear indication of the loyalty of the student body to the school organization. The spirit that grows out of chorus practice reaches the culmination of its use at commencement time, when the students have the opportunity to crystallize their feelings developed during the year in the selection of songs for closing exercises or in the writing of original words and music. After a while it will be found that the music in connection with any entertainment will be particularly adapted to its purpose and become symbolic of the occasion, so that this music will gradually grow to permanency and can be used from year to year, gradually developed and crystallized, so that the school can have a traditional exercise that can be used whenever the occasion demands.

It should be our earnest endeavor to have music occupy the place it deserves in connection with all school activities. If placed on its right basis, it becomes a part of the life of each student and naturally creates a desire to participate in and to hear music. It will also cultivate a taste for the best in music and will ultimately raise its standard.

PUBLIC-SCHOOL MUSIC AND OUR NATIONAL SPEECH

FRANCES ELLIOTT CLARK, CAMDEN, N.J.

There is no clearer indication of the culture of an individual, a nation, a race, or a civilization than the clearness, accuracy, beauty, and refinement of the speech. Speech in some form, tho crude and rough, is as old as the human race. In the infancy and childhood of man, speech was first inarticulate sound, giving expression to the most elementary needs of the human animal. As the race progressed, speech grew and took on the elements, first of necessity, and then of beauty, of culture, and the expression of the inner life. The degrees of civilization of the ancient races may be marked by the inflection and developments of their language. We find the ancient Hebrew, living in a time when surrounding nations were still half savage, using beautiful language, figures of speech, writing and using poems of high order, and a vocabulary of rare and wonderful words. Nowhere in all the world is found more beautiful and more poetic expression of human love, hope, fear, trust, praise, and divine aspiration than in the books of the Old Testament.

The ancient Greeks wrought a civilization that has been the wonder of the ages. The height of this glory was expressed in the inflections of its language and in its arts. The Latins have impressed their progress upon the world, not so much by chivalrous deeds and works of skill or inventions of utility, as by their language, which stands until this day, the root mother of the languages of the western world. Those ancient and forgotten centuries are lighted for us, as with beacons, with the oratory of Demosthenes

and Cicero, and the wisdom of Plato and Aristotle, in the most beautiful speech. The European countries, developing their civilization from the Greek and Roman, have still carried into the various families of tongues the main characteristics of the Latin. Thus we find the French, the Spanish, and the Italian closely related, with very many similar words and similarities in constructions, each adding to the mother-tongue such modifications and peculiarities as were found in the speech of barbarous nations and races in different countries to which it was carried. These, thru the centuries, have taken definite form, and so given to the world the beautiful, soft, liquid speech of the southern races, reflecting the languorous life of the southern climate, the open-air existence, and the quick passions of the Latin people.

In the German we find a more vigorous expression, the more guttural sounds of the prehistoric race of Goths. Later the religious temperament, the calm, clear judgment, the strong respect, honor, and veneration for the home life, brings to us the German in its strength, beauty, and tenderness in religious and home expression.

In the North, we have the wilder, forest-living Saxons, Angles, Celts, Slavs, and Normans. The blending and amalgamating of these races brought forth a wonderfully vital speech, a new speech that expressed in a homely way at first the highest ideals and the most commonplace necessities of life. As one invasion after another swept over the Isles of Britain, each left a residuum of speech that gradually melted into the conglomerate whole, each expressing some thought peculiar to the race or country from which it came. Because of these numerous contributions to the original speech of the native tongues, the English language during centuries of growth has come to be a very wonderful vehicle of expression of human needs and human ideals of a great number of the world's inhabitants. It has grown century by century, by accretion from all other tongues, particularly the Latin, from which it originally came, and the German or Saxon, the Norman-French, and a large percentage of the original Celtic.

Now the speech of these northern peoples originally abounded in the consonants, which were difficult of enunciation, and were consequently often mouthed and obscured, reflecting the difficult existence of the fisherman, the seafaring and mountain life of the early inhabitants.

The soft Italian, with every word ending in a vowel, in contrast to the Welsh, with its unpronounceable consonants, furnish us an interesting chapter in the history of the races. Yet because of the effort required to enunciate the difficult consonants, our Welsh singers of today are shining examples of clear diction. For political and other reasons, French was the court language of the world thru many centuries, because of the intermarriages and personal relations of the royal families of Europe, and the homage paid to the more highly sensitized speech of the French court.

The English tongue was not for many years brought forward and

honored as a finished language even among English-speaking peoples. It is interesting to note that the present Queen Mary is the first British queen in long years, and there have been only a very few in all history. The English royal family has always been French, or German, or anything but English.

To realize the reasons why English has not been the vehicle of the music of its own world is to go back a long way into the history of the country.

In the years before the Roman invasion, the natives had a music that was far in advance of the southern countries. The early Irish used a form of notation engraved on stones before Hucbald. The Irish and Scotch had gone far in the use of the harp and the pipe before the rest of Europe had awakened. This was all crushed and broken in the series of conflicts between the rival houses and later under the Puritan régime.

At the time that Bach and Handel began what we know as modern music, English was suffering musically under the fanaticism of the Puritans who had connected the evils, the revelry, the disgraceful debauchery of the courts of Henry VIII and of Elizabeth with music, and so had placed a ban upon this most beautiful of the arts, thus retarding the development of music in England for 200 years. In the earlier years, the minstrels of the North, the harpers with their glees, lilts, songs of home and love-lyrics, had surpassed the world. The Irish monks forming new monasteries in Switzerland and other countries carried with them the beautiful songs of Ireland—and in folklore there was nothing so beautiful; but this later abuse of music by royalty had worked irreparable harm to its development. Southern music was not so handicapped, and came to fruition by natural development. For 400 years Europe has been developing and fostering music, but note, each country in its own language.

Coming to the last fifty or one hundred years, the great work in composition has been, of course, done in Germany, Italy, and France, each composer, naturally, writing in his native language. When we in America turned our attention particularly to music, only about fifty years ago, it was the most natural thing in the world that our aspiring singers should study music in the only obtainable form. As the years have passed and we have developed a vast number of voices whose art has startled the world, it has been inevitable that our singers should give themselves fully to the study of the great music of the world in its original form. Hence, it has come about that every young singer of any degree whatsoever, has felt the absolute necessity of perfecting himself in Italian, French, and German. Until recently it has seemed to be of not the slightest moment whether his native English were spoken or mumbled. His life was being given over to song; song was foreign; therefore, why bother about the English? Within the past ten years there has been considerable stir in different sections, with varying degrees of earnestness, as to the possibility of

having opera in English. Opera in English has always meant English opera, which reduced the matter immediately to the lighter form of the Gilbert-Sullivan sort, or of the still lighter and meaningless operatic extravaganza. There has been a well-defined opposition on the part of foreign artists to attempting to sing in English. They voice a baseless prejudice against the English tongue as a singable language. Our own artists, foreign-trained, have mostly been lukewarm, skeptical, or openly antagonistic, owing to the difficulties in obtaining translations that preserved the thought of the original with some attempt at making the English words fit the music, and at the same time make sense.

The feeling of the foreign artists against English as a singing medium has been, first, their rooted prejudice against the English tongue, and second their unwillingness to put themselves to the trouble of mastering another language when it was not demanded. Our artists going to the other side know perfectly well, years before they go, that any recognition or engagement over there presupposes a working knowledge of the language. Nobody thinks anything about it—it simply has to be done; therefore they do it.

The foreign languages are a part of the curriculum of every well-regulated high school in our country and of course of the colleges and universities. A student preparing to go abroad to study music will study arduously the Latin, French, and German for months and years, and then by a term of residence abroad, work with unremitting ardor to perfect the accent. During these years of strenuous attempts to acquire other accents and inflections, and living where English is seldom spoken and infrequently heard, it is no wonder that our own artists become careless in their English diction. The foreign artists know that it matters not a pin whether they know a word of English or not. Their recognition here rests only upon musicianship, and we madly applaud and pay fabulous sums to hear grand opera, and understand not a single word of it. This would not be possible in any country in Europe. There, opera must be sung in the language of the country.

The foreign artists find difficulty with many of our consonants, pre-eminently the *th*. The French and German both find this sound distinctly difficult. It is not one whit more so to them than the nasal French *n* or the guttural German *ch* is to us. The difference lies in the motive power. We must; they need not if they do not choose. There is now a well-defined movement to remedy these conditions and to bring about a reform in the matter of having opera sung in English; first, by our own composers creating grand opera in our own tongue; second, by having scholarly translators make more singable translations of the foreign make; third, by educating our people, our children, to love opera and then to demand it in our language.

A society has been formed in New York for this particular purpose, headed by David Bispham, known to all of you, who is an exponent and

shining example of the possibilities in clear diction of the English tongue. Many of our own greatest artists are heartily in favor of this movement—are lending support to it, and promising their aid in furthering the project. Mr. Dippel and Mr. Gatti-Casazza, managers of the great opera companies, are promising some grand operas in English for next season. Mr. Dippel feels very strongly on the subject, and is entering upon a campaign to give America a national opera. There are many forces at work in various parts of the country, looking toward the same end, determined that we must emancipate ourselves and demand our music in our own language that may be understood by everybody.

Now this, as I see it, can come in one way only—that of reaching in some way the growing youth of our land—the coming generation—and lifting them into a higher realm of appreciation and respect for their own language, and an ability to use it in a way that shall command the respect of other nations. This cannot be done in the teaching of reading and elocution, from the fact that in the ordinary teaching of reading in the schools so much attention must be given to the thought, the spelling, the form, that vocal expression has ceased to be a vital part of the instruction. Teachers of reading are in many cases exceedingly weak in voice culture. Studies have multiplied at such a pace that our children are taught to grasp thought, to scan the page, to gather rapidly the idea contained, and scant attention is given to the vocal expression. Good, plain, musical reading is almost a lost art in our schools. We teach the children to think so fast, to work with brain and hand at such a rate, that the voice has been sadly neglected.

We are criticized abroad unmercifully for the crudeness of our speech. Europe smiles indulgently but superciliously at the Americanisms in our speech, the shrill, high tones of our women, and the rough, uncultured tones of most of our men. A newspaper article a few days ago gave an amusing account of schools being opened in London, and many prominent teachers advertising to teach Americans and Colonials "English." The article stated that there has been so much demand on the part of Americans who find their speech distinctive and provincial that such schools have become a necessity. To cure the high voice of our women, they prescribe whispering—they say that the universal habit of the rising inflection at the end of words, which is of Indian origin, can rapidly be modified. They also assert that it is almost impossible "to cure the American nasal twang completely after it has become thoroly habitual."

Loyal as we are to our own, it must be confessed that seven-eighths of our speech *is* provincial—is of many different dialects, shades, sorts, and kinds. Even among the cultured people, the speech in different localities differs as widely as among the uncultured. Just which is the real or typical speech, and in just what locality in all this land shall we find the correct type-form of American speech?

We are perfectly well aware that in the mother-country there are dialects, and that the misplaced *h* and the *ow* and the *o* are as differently used in different sections of London, as are the different sounds of *a* in our own country. Being nearer the shores of classic England, our New England states preserve the broad *a* in much more distinctive form than is found in any other section, and is without doubt most nearly the English accent. The *cälf päth* of the Bostonian is, however, as obnoxious to the Ohioan and the Hoosier as is the flat *a* to the ears of the dweller in the seacoast cities. In the Middle West the extreme broad *a* is an affectation, a pose, and subject only for ridicule. The short *a* is used in every word possible. *Cän't* is a joke, and *päss* and *gräss* are "stuck up." I well remember rehearsing diligently in a singing school, to acquire clear articulation, a line running thus: "Aunt, Grant, Can't, Chant." The long *o* becomes more nearly the *aw* in many places in the Middle West, as in *naw* for *no;* while in the East in many instances it is more nearly *ow*, as in "Don't you know."

In the southern states there is the perfectly charming dropping of final *g*, and the changing of the final *r* to *ah*, giving to us *deah*, *doah*, and *floah*—musical, but impossible to the people in any other section. As if to balance this dropping of the *r* in the South, the New Englander tacks an extra one on, giving such words as *idear, mammar, etc.*

In the Middle West there is unusual carelessness in the use of the different forms of the verbs *see* and *go;* the correct tense-form seemingly being of impossible mastery. There is equal difficulty in the use of the personal pronoun. Almost everywhere there is unforgivable carelessness in the pronunciation of many common words, to say nothing of long lists of words in common use, altho of foreign extraction.

The picturesque slang of the newer West has filtered thru the entire country, finding most productive soil in the colleges and universities. All the efforts of the teachers in English in these higher schools seem to be absolutely inadequate to stem the tide of this expressive but inelegant speech. Truly, we are in a serious difficulty in our attempts to measure up more and more each year to the standards of Europe in culture, refinement, and art. Now, what is a possible remedy? It is hopeless to expect a uniform speech to result from any teaching of reading, but here is a curious and quite disregarded fact. Did you ever know or realize that while our speech differs so radically in different sections of the country we all sing comparatively alike? Is this not the strangest thing imaginable? Did it ever occur to you as the panacea for our ills of speech? The singer from the farm in Ohio or Indiana, having studied even a little singing, will pronounce in singing almost, if not quite, the broad *ah* of the Bostonian. The short *a*'s, while common in speech, sound so flat in singing that almost unconsciously it broadens into the correct sound. One who will invariably address a relative as *Ăunt*, will quite certainly sing *dăncing, răther, lănd,*

etc. The dropping of the *r* in the southern singer is not conspicuous in singing, while the quick volatile speech of the typical westerner does not appear in the singing of good music.

If singing be properly taught, the articulation and enunciation is much more clearly brought out than is ever done in ordinary speech, and as I have said, the result is virtually the same in all sections of the country. We all sing much better than we talk. Is it not then obvious that school-music supervisors who have in hand the musical training of the children have a wonderful opportunity for correcting much of the imperfection in speech and of building at least a singable pronunciation by teaching the children to sing with correct diction? Now this is not a daydream nor at all an impossible task, neither should it be regarded as an extra burden to the already busy supervisor, or to the crowded courses of study. It simply means infinite pains at the beginning and all the way up thru the grades, insisting that every syllable and every word in every song shall be clearly understood.

It is with the younger children that the effort should be made to establish correct habits of articulation. This will not come by chance but must be done by distinct and definite drills and exercises. Now these last two words have been banished from our vocabulary for some years, but I believe we are all coming to realize that however hard we may try to make our work beautiful, to lead the child gently by means of play, and to uphold his interest and affection for the work by making it beautiful at every turn, yet there are some things that absolutely demand a certain amount of old-fashioned drill, and this matter of articulating our mother-tongue is one of them. It is not too much to teach little children the proper position of mouth for the vowel sounds, and to give little songs particularly adapted to following up this teaching.

Children in kindergarten may be taught how to sing in the front of the mouth, a long, round *o*, the long *oo*, the long *e*, the long *a*, the bright *ah*, or *aw*. We may make it a game and they enjoy it as well as another. The flexibility of lips, jaw, tongue, and throat which comes from such vowel exercises, is a very valuable acquisition in all his future life in singing and speaking. Beginning in the kindergarten and coming along thru the grades, the utmost care should be taken to enunciate distinctly every consonant, whether initial or final, and in any combination.

Evan Williams, who is a remarkable example of perfect diction, has given in a series of lessons a melody on each vowel of the alphabet, prefaced by every consonant of the alphabet. It is a wonderful exercise, and without doubt the children practicing on these would acquire great facility in diction. Another composer has written a little booklet of six vowel songs, bringing out in delightful little song-form the vowel sounds. Another composer has published a book based upon the tone development using the vowels.

Some years ago I derived more help in this particular field from a book-

let of lessons by Frederic Root, Chicago. Mr. Root has given a great part of his professional career to this matter of diction, and in the booklet gave most helpful suggestions and exercises. He, in common with Sieber and others, uses to splendid advantage the Italian syllables, *la, be, da, me, ni, po, tu.* These syllables give the long vowel prefaced with liquid or labial consonants, are most helpful, and may be applied to any vocalized exercise or melody. The syllables of our major scale are almost equally good, but we have used them carelessly so long that it takes extra effort to induce proper care in their use.

In these lessons of Dr. Root is a couplet of a stanza of familiar song which I have used with children of grammar grades to splendid advantage, with its original melody or chanted on the tones of the tonic chord:

The dew lay glittering o'er the grass,
A mist lay over the brook,
At the earliest beams of the morning sun,
The Swallow her nest forsook.

Any exercise of this sort that helps the children to gain control of the organs of speech, to render flexible the muscles of the face and throat, is valuable. One I have used many times to vitalize the breath muscles and *de*vitalize the throat, jaw, and tongue, is to chant softly the alphabet thru, with extraordinary effort at enunciation, but the merest thread of tone, and a perfectly flexible throat. Another most excellent exercise in control of the facial muscles and forming of mouth, is to pantomime the words of any familiar stanza of poetry or verse of song. This, of course, produces facial contortions which are ludicrous in the extreme, but it brings the desired results. With it I have many times broken up the immobility of mouth with boys of grammar age, who insist in speaking, reading, and singing with the teeth nearly closed, and immovable jaw and tense facial muscles. It is great fun—the children enjoy it, and you get what you want—distinct enunciation. Ask a pupil who does it well to come before the class and pantomime a stanza that all have studied, and see if they can read from the lips and guess the selection.

Another stanza in Professor Root's book has been used for this tongue-loosening with splendid effect, sung a line to each note of the scale or chanted on different tones:

Here is a subject for close contemplation
By every singer of whatever station;
One to be met without weak consternation,
But with invincible determination,
Giving it carefullest consideration,
Scorning depression and spurning elation,
Till we've explored every ramification
Of this most wonderful thing in creation.

There are many poems of standard classics that are excellent for practice; Tennyson's "Brook" and Poe's "Bells" are most excellent. It is

utterly absurd for us to permit our foreign critics to assert that the English is not a singable tongue. We have brought this upon ourselves, by ourselves, by our utter indifference, and carelessness in teaching in schools and elsewhere. It is not enough that our children can vocalize with respectable tone on a broad *ah*—we must go farther and insist that the words of the song shall be intelligible—not some of the words only, but every last, single syllable, down to the prepositions and articles. It rests with the music supervisors to bring this reform. It is the only way in which it can be done.

How To Aim The Voice

PARISIAN SAVANT DECLARES FEW PERSONS SPEAK DISTINCTLY

Paris, June 17.—A distinguished Parisian laryngologist, Dr. Pierre Bonnier, has been telling the public for some time past that in addition to not knowing how to eat or drink or sleep or dress or walk, men do not know how to speak properly.

According to his theory, the more we try to hear our voices at a distance from us the farther the voice is produced in front of the vocal mechanism, which adopts the room in which we are speaking, as an extension of itself. In other words, the ear should aim at the point which the projected voice should reach, just as the eye, in taking in the distance of a mark, unconsciously directs the arm which throws a stone at it.

Many forces are at work to bring about better musical conditions thruout the country. Promoters of opera in English need and should have our unqualified support. By actually teaching the children in the school to sing correct English, to appreciate the beauties of our own speech, thus lifting the standards in English everywhere, we can give this impetus in a thousand times more practical way than by merely wishing the project well, and condemning it with faint praise.

We Americans pay more money for grand opera than any other country in the world, and understand less of it. The children who are today in our schoolrooms are to be in the next decade the opera-goers and critics. Let us make it possible for them to have sufficient faith and loyalty in the language of their own country to demand that their opera shall be given to them in intelligible form.

Let us cease demeaning our own mother-tongue by blind worship of everything foreign, whether it be bad or good, silly or sensible. The English speech has come to be the universal language of the world. Let us honor it by treating it with the respect that is due, and by means of the music in the public schools let us do our part in hastening the day when Americanisms shall cease to be a reproach. With all due apologies to J. G. Holland we paraphrase:

God give us English. A time like this demands
Teachers, whom the lust of cramming does not kill;
Singers, whom the lure of Europe does not spoil:
Americans, who possess opinions, and a will,
And love for native tongue, and flag, and soil;
Artists, who can stand before the cry and clamor

That shrugs "Impossible" and deems our opera a fable;
Great artists, sun-crowned, who live above the glamor
Of foreign "atmosphere" and tongues of Babel.
For, while our people with their careless tongue and speech
Murder our language, spite of all we teach
Ignore our own composers—lo, Apollo sleeps,
Alien song rules the land, and waiting English weeps.

THE OPPORTUNITY AND THE RESPONSIBILITY OF NORMAL SCHOOLS IN PUBLIC-SCHOOL MUSIC

C. A. FULLERTON, DIRECTOR OF MUSIC, IOWA STATE TEACHERS COLLEGE, CEDAR FALLS, IOWA

In this discussion I am assuming a very positive need for musical culture in our country. I am assuming that the type of citizen that must be developed in America will not only be trained to intellectual discernment and manual efficiency so that he may become a good machine for earning money, but that he be a man of high ideals and pure motives so that the money which he earns shall be wisely spent in administering to his own needs and to the needs of society. I am assuming that in the development of the higher life of this citizen, art in general and music in particular, will have a large part.

The kind of recreation which occupies the leisure hours of our people is a factor of tremendous significance in determining their place in modern life. The distinction between the people represented in the "rogues' gallery" and those represented in the "hall of fame" is much more pronounced in the line of emotional trend and emotional training than it is in mental discernment or in manual dexterity. In mental discernment the "rogues'-gallery" crowd would compete quite favorably with the others, while in "manual dexterity" they would outclass them. The difference between these two classes—the enemies of society and the benefactors of society—is largely a difference in ideals and motives, and, excepting religion, there is no greater single influence in society for raising the standard of life than the enriching and ennobling power of good music. The first step in the music education of the masses of the people is to realize the value of it.

My topic is the opportunity and responsibility of normal schools in music education. The phenomenal growth of the past few years in public-school music is but an expression of a growing desire on the part of the masses of the people to have their children experience the benefits of music in their lives. Public-school music is the conservatory of the common people, and it outstrips in its influence any other conservatory of music on the globe. It offers opportunities for the promotion of musical culture that have not been equalled in the history of the race.

This rapidly increasing interest in school music gives the normal school a special vantage ground in music education. The music education of

the people is largely in the hands of the public-school teachers, the responsibility being divided between the regular grade teacher and the special music teacher or supervisor. So far as the regular grade teacher is concerned, a few have studied singing with private teachers, a gradually increasing number, but a small percentage of the whole, have had the benefit of school music thruout the grades and high school and are fairly well equipped to teach the subject, but the great majority of grade teachers in the public schools are helpless in the music work unless they have had some special training for it. Now the normal school furnishes the only adequate opportunity for the training for this music work.

Of all the state normal schools in our nation, a large majority require at least two terms of music for prospective grade teachers. The first problem for the normal schools is to use these two terms in the most effective way, and the principal purpose of this paper is to make some suggestions in this line. Thirteen years' experience in the department of music in a normal school has given me a very firm conviction that, from any viewpoint that may be taken, these two terms of music far exceed in importance any other phase of music work in the department if the best use is made of the opportunities offered in them.

My faith in the possibilities of this elementary work is so strong that I believe a new era in musical culture would dawn if every normal school in the United States were to begin by placing the principal emphasis on the musical growth and training of its general student body. The beginning class in music should be a vital force in the school. It should be a class in *music* in fact as well as in name. If it is merely a class in "note-reading," and in the "elements of music," and in "methods," and what not it is all right to speak of it with the apologetic air that is sometimes used; but if the spirit of song is ever present in the class, if growth in musical efficiency and in musical appreciation is constant, if the teacher not only has the enthusiasm and tact and judgment that combine to make the inspiring leader, but if his methods are such as to place his work in line with the best educational ideals of the twentieth century, then the conditions are supplied for developing a department of music that will be worthy of any educational institution.

It will not do to underestimate the importance of using the very best methods in these classes. If there is any teacher who needs to discriminate carefully between the *good* and the *best* in methods, it is this teacher of the beginning classes in music. Time is valuable, and it is important that all waste be eliminated and the musical growth of the class be provided for along the line of natural development. It is a matter of small concern whether a method is old or new, but a matter of tremendous significance whether it is good or bad. The past twelve or fifteen years have brought about a revolution in the methods of teaching public-school music—a revolution that had occurred in many other lines of public-school work

a generation earlier. It is now well established from the standpoint of the practical teacher as well as from the standpoint of the psychologist that the song itself forms the basis for school-music work, not only in the first grade, but thruout all of the grades; that technical skill is best developed in dealing with songs, rather than with mere exercises; that the intervals of the scale are to become known to children from their musical setting in a song; that a masterful and musical use of rhythm is best developed by mastering in a musical way the rhythm of all the songs studied. Old notions are hard to break away from and we still find teachers putting children thru a course of scale drill as a preparation for teaching them to read music just as their ancestors were drilled on the alphabet before they were permitted to learn to read. And there will be publishers to push the sale of music books founded upon these same conceptions of teaching just as long as the teachers will continue to use such books.

These beginning classes for adults furnish a fine opportunity for testing methods. Unless a symmetrical development is maintained in singing, in sight-singing, and in a knowledge of the elements of music, the evil results will soon be apparent. The emphasis that is being placed on the song in modern sight-reading and the written work that is involved in the use of the song as a basis for technical training is bringing in a new era in technical skill—skill in the performance of music itself rather than in merely juggling with the elements of music.

Now what will be the practical results of a general educational campaign in music with the rank and file of the students as is here outlined? One far-reaching, all-comprehensive result will be that everybody will be growing in musical skill and musical appreciation. Students who are to go out to teach, with the exception of a limited number, will be prepared to do adequately the music work in the public schools. They will prepare for the public-school music by doing the work themselves. They will be able to sing, read music, clap the rhythm, and reproduce simple melodies in any required key. They may not take a very elaborate course in music, but what they do take will be a part of them. It will not only be in their heads, but also in their hearts, and in their ganglionic centers. The superintendents and music supervisors with whom they are to work will welcome gladly all the real musical training they have had, and the schoolroom will furnish an excellent opportunity for their further development musically.

Now if there were no further results than merely sending out teachers who can sing and teach music successfully in the schools, the music departments of these normal schools would justify their existence, and in two terms of daily work in a normal school this can be done quite satisfactorily. But there are other results. When everybody is interested in music those who have special musical ability will be discovered, the background will be established for a special school of music if it is desired to have one. When two terms of such work are completed, there will be a momentum established

which carries along into a third term of music. A good appetite will be developed for some work in harmony, in the history of music and biography of musicians, in musical form and musical appreciation, in chorus and glee-club work, and private lessons in voice, and if sufficient interest is produced in these elementary classes so that enough students apply for private lessons in voice to employ a good voice specialist, what school is going to deny them the opportunity?

So far as musical appreciation is concerned, it is the student who is making some definite progress in his own musical growth—who is participating in some way in the performance of music—that is likely to get the most lasting benefit from such a study. Educationally, there is a tremendous difference in the value of a victrola when used in a class of music students and when used with a group of people who are doing nothing for their own musical growth. The appreciation of any good thing involves more interest than a mere passive attitude. The educational value of the victrola and the pianola is beyond words to express when used by sincere students of music whose sincerity is shown by their actual study of music, but when used for students who merely expose themselves to the sounds, the result may be merely an affected appreciation which is in reality an educational liability.

Some details concerning the results of emphasizing the elementary class-work in the school which I represent may be of interest. For a good many years the music department consisted of but one teacher who gave piano lessons, voice lessons, taught classes, and directed all of the singing. As a result of placing special emphasis on the first and second terms' work, a third term was called for by students of special promise in music. A fourth term followed, and for a few years a large number of students completed the four terms of music. This created additional interest in glee-clubs, in the choral society, and in voice lessons and the work of these organizations and the voice lessons increased the desire for the further study of music. The classwork was gradually extended to a course of nine terms, or three years, for music supervisors. Last year there were sixty students taking this course. The course is shortened to two years for graduates from fully accredited high schools who have had considerable musical training. It consists of harmony, history of music, sight-singing, ear-training, methods, supervision, conducting, musical appreciation, aided by the pianola and the victrola, theory of music, the study of the child-voice, practice teaching in the training school, private lessons in voice and piano, and a considerable amount of scholastic and professional work, including history, rhetoric, literature, elocution, nature-study, sound, psychology, school management, and history of education. There are similar special courses in voice, piano, and violin. The large number of special music students helps to develop a musical atmosphere, and the musical atmosphere helps to develop the music students. Three glee-clubs for women and two

for men are constantly maintained. A choral society of 150 prepares an oratorio to be given at the May Music Festival with the Thomas Orchestra. This year's was the ninth. Three voice teachers are employed for special voice work. They gave 4,226 private lessons during the past year. Ten music teachers are required to do the work called for in these various lines, but emphasis is still placed on the work in the elementary classes. The work, however, is not so elementary as it once was. Our music law, which requires that music be taught in all the schools of the state, has assisted materially in leveling up the musical experience of students before entering our school, and owing to this previous knowledge and to the improvement in methods, they are able to make much better progress than the classes formerly made. The general musical interest in these classes is in no way hindered by emphasizing the elementary work. On the contrary it is augmented. I question if our use of the pianola and victrola is more effective anywhere than in the weekly performances in these classes.

There is no doubt that there is a wide difference in the conditions for musical development in the various normal schools. Some of these schools do not aim to do more than to prepare teachers for work in the grades and in the rural schools, while others are being transformed into teachers' colleges in which not only rural and grade teachers are trained, but high-school teachers, principals, and superintendents, and all the special teachers employed in the public schools. In the musical preparation of the grade teacher the elementary normal school may have certain advantages over the teachers' college in having a more liberal allowance of time for this work, while the teachers' college would be expected to furnish more educational stimulus and maintain a higher level in musical standards. In either case the opportunity in music education is a rare one, and the responsibility correspondingly great. Notwithstanding the splendid work that is being done, there is urgent need for a well-organized campaign in the musical preparation of the grade teacher, and it must be waged mainly by normal schools. Let us enlist the co-operation of the best musicians that we may keep our musical ideals high; the co-operation of the professional educators that we may be guided by right educational ideals; and the co-operation of superintendents, principals, and music supervisors, that we may give these grade teachers the practical training that will enable them to do satisfactorily the work assigned to them.

DEPARTMENT OF BUSINESS EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Frank E. Lakey, English High School.....Boston, Mass.
Vice-President—Winfield S. McKinney, Englewood High School.....Chicago, Ill.
Secretary—Sherwin Cody, 1411 Security Building .....Chicago, Ill.

FIRST SESSION—Wednesday Forenoon, July 12, 1911

The first meeting of the Department of Business Education was called to order in Golden Gate Corinthian Hall at 9:30 A.M. by Charles H. Murphy, principal of the Commercial High School, San Francisco, Cal., who in the absence of Frank E. Lakey, the president of the department, introduced the vice-president, Winfield S. McKinney, Englewood High School, Chicago, as presiding officer of the session and acting president for the meeting.

Registration blanks were filled out, showing an attendance of about sixty.

The first paper was on "Bookkeeping Fundamentals," by Winfield S. McKinney, Englewood High School, Chicago, Ill.

This was followed by a paper on "Teaching Typewriting for the Best Results," by James S. Curry, High School of Commerce, Cleveland, Ohio. This was discussed by Stephen Dwan, head of Commercial Department, Broadway High School, Seattle, Wash.; Charles H. Murphy, principal of the Commercial High School, San Francisco, Cal.; and Alexander H. Thomson, teacher of commercial subjects, Napa High School, Napa, Cal.

The next paper was by Sherwin Cody, Chicago, Ill., on "Business English: What? Why? How?" and was followed by questions and a general discussion, participated in by Benjamin Ide Wheeler, president, University of California, Berkeley, Cal., Stephen Dwan, head of Commercial Department, Broadway High School, Seattle, Wash., and others.

C. W. Childs, of the Manual Training and Commercial High School, Oakland, Cal., read the next paper on the program, on "Commercial-Economic Geography."

A motion was made and carried that the second item of the program on Friday should be a discussion of "Curricula in High-School Commercial Departments," and Benjamin Ide Wheeler, president of the University of California, Berkeley, Cal., was especially invited to be present and take part in the discussion.

The following resolutions were then read by the Secretary:

Whereas, The rapid development of commercial education thruout the United States and the world gives rise to many important problems as to the relation of the private business college to the commercial high school, the courses of study best suited to a broad commercial education, and the ways in which the highest success can be obtained in each individual branch of commercial teaching; and

Whereas, In the United States there is no governmental central authority to direct the course of education, especially commercial education, and this central work must necessarily devolve upon some national voluntary association such as the National Education Association, which means (as far as commercial education is concerned) the Department of Business Education of this Association; and

Whereas, We believe that this department should enlist the interest of all commercial teachers thruout the United States, and the money they contribute as membership dues should largely be devoted to gathering and printing in authoritative form the best information as to courses and methods; therefore be it

Resolved, That the acting president shall appoint a committe of five, of whom one shall be the president to be elected for the ensuing year, one shall be a representative of the private commercial schools, one a representative of the public high-school commercial

departments or higher schools of commerce and finance, one a business man interested in commercial education, and the fifth a representative of the commercial textbook publishers; and with these shall be associated a committee containing a representative of each state in the Union, this associate committee to be chosen by the preceding committee of five. It is further

Resolved, That this committee shall be considered permanent until its existence is abolished by vote at the regular annual meeting of the Department of Business Education of the National Education Association, tho its membership may be supplemented or changed at each annual meeting, as may seem best to the department, and vacancies may be filled during the year by the president of the department.

This committee is instructed:

1. To invite every commercial educator thruout the country to become a regular, permanent member of this department;

2. To ask the Board of Directors or body of active members of the National Education Association to appropriate a certain sum for investigation, and permit the addition to this sum of all fees received in answer to the solicitation for new members;

3. To collect information as to the courses of study now being pursued in representative schools, both public and private, together with a clear statement of the reasons which determined each course;

4. To ascertain in what schools the highest success is being obtained in the teaching of each individual commercial subject, and to obtain from the teacher or director a clear statement of the reasons and methods thru which this success has been obtained; and

5. To report on the importance of having a special director for public-school commercial work, and if this director should be a teacher, or a business expert, or a teacher and a business expert consulting together, or if it is advisable to have the assistance at all of a business expert not experienced in teaching;

And to carry out such part of this work as the committee finds itself able to accomplish, taking into consideration both the time of its members and the money that shall be at its disposal.

The acting president appointed as a committee on nominations the following:

A. B. Way, head of Commercial Department, High School, Petaluma, Cal.

Lorenzo D. Inskeep, vice-principal, Manual Training and Commercial High School, Oakland, Cal.

Stephen Dwan, head of Commercial Department, Broadway High School, Seattle, Wash.

The meeting was then declared adjourned until Friday, July 14, at 9:30 A.M.

SECOND SESSION—FRIDAY FORENOON, JULY 14, 1911

The second session of the Department of Business Education was called to order promptly at 9:30 A.M. by Winfield S. McKinney, the acting president, with 111 persons present.

The first paper was by Alexander H. Thomson, teacher of commercial subjects, Napa High School, Napa, Cal., on "Shorthand—Its Educational and Practical Value." A second paper on the same topic was given by George A. Clark, Leland Stanford Junior University, Stanford University, Cal.

The special discussion on the topic, "Curricula for High Schools of Commerce in the United States," provided for by special vote of the department on Wednesday, was introduced by a paper read by Charles H. Murphy, principal of the Commercial High School, San Francisco, Cal. A discussion followed, in which the following took part: C. W. Childs, Manual Training and Commercial High School, Oakland, Cal.; Albert G. Morse, teacher of mathematics, Polytechnic High School, San Francisco, Cal.; Reginald R. Stuart, head of Commercial Department, High School, San José, Cal.; Paul L. Evans, Berkeley, Cal.; Stephen Dwan, head of Commercial Department, Broadway High School, Seattle, Wash.; Lorenzo D. Inskeep, vice-principal, Manual Training and Commercial High School, Oakland, Cal.; Mrs. L. L. Harford, Berkeley, Cal.; B. F. Hart, High School, Westport, Kans.

The subject of the next paper was, "To What Extent Are Teachers Responsible for Failures of Students in the Classroom?" by Thomas L. Brecheen, teacher of commercial

subjects, Fremont High School, Oakland, Cal. A second paper on the same topic was given by C. A. Bernhard, Commercial Department, High School, Ukiah, Cal.

The last paper was on "The Essentials of the Ideal Commercial Teacher," by P. M. Fisher, principal, Manual Training and Commercial High School, Oakland, Cal.

Secretary Cody then introduced the following resolution, which was unanimously adopted:

Resolved, That the three officers of the department be constituted a committee to arrange the program for next year, and they shall increase this committee to five by appointing two additional members, at least one of whom shall be a resident of the city in which the next convention is to be held. It is directed by the Department of Business Education that work shall be begun at once on next year's program, in order that those who shall take part may have ample time in which to prepare worthy papers. Also, if possible, a longer program should be arranged.

The report of the Committee on Nominations was then given, as follows:

For *President*—WINFIELD S. MCKINNEY, Englewood High School, Chicago, Ill.

*For *Vice-President*—GEORGE E. MYERS, principal, McKinley Manual Training School, Washington, D.C.

For *Secretary*—THOMAS L. BRECHEEN, Fremont High School, Oakland, Cal.

It was moved and carried that the report be adopted and that the secretary be directed to cast a unanimous ballot for the officers nominated.

Mr. Cody moved the adoption of the following resolution, supplementary to the resolutions passed on the previous day:

Resolved, That the committee of five provided for in the resolutions passed on July 12 by the Department of Business Education be amended so as to make it a committee of seven, to include the vice-president and secretary of the department as members ex officio, and they and the president shall continue as members during their terms of office only, unless reappointed.

The motion to amend was duly seconded and unanimously adopted.

It was requested that the complete resolutions be read as amended, and they were so read by the secretary. At the conclusion of the reading, Mr. L. D. Inskeep, vice-principal, Commercial High School, Oakland, Cal., offered the following amendment:

That the committee of seven consist of the president, vice-president, and secretary of the Department of Business Education, and four others appointed by the president, striking out the part of the original resolution specifying how this part of the committee shall be made up.

The motion to amend was duly seconded and adopted.

The meeting then adjourned.

SHERWIN CODY, *Secretary*

*Since the Convention Principal Myers has resigned and Charles Hart, head of Department of Practice, Business High School, Washington, D.C., has been appointed to fill the vacancy on authority of the Executive Committee of the Association.

PAPERS AND DISCUSSIONS

BOOKKEEPING FUNDAMENTALS

WINFIELD S. MCKINNEY, COMMERCIAL DEPARTMENT, ENGLEWOOD HIGH SCHOOL, CHICAGO, ILL.

It may be worth while to note some differences between the essentials of accounting, which has to do with the construction of the balance sheet and a loss-and-gain statement, and bookkeeping fundamentals, which are concerned more specifically with the forms of record and the principles

underlying the rules for determining the proper entries to be made in the various accounts. The former places emphasis upon the "why" rather than the "how," while the latter, not neglecting the "why," gives more consideration to the details of technique, or the "how"; but so interwoven are the two that it would be impracticable to draw a strict line of demarkation between them.

An adequate record of the vital facts of a business should be regarded as fundamental. Such a record should be brief, clear, and unequivocal, affording the requisite data from which might be constructed a complete narrative or story of the business.

The next fundamental in the order of development is the classification of business facts into appropriate accounts. (The record and classification of these business facts, or transactions, are frequently combined, as in the journal, cashbook, etc., preparatory to transferring to the ledger.)

But at this stage of progress much difficulty is encountered because of lack of standardization in terminology, which extends to the function of accountancy in even a greater degree, perhaps, than to bookkeeping. Faulty classification in bookkeeping results in grouping miscellaneous items into accounts which must be analyzed and redistributed in order to obtain intelligible results. A standardized terminology is, then, a fundamental need of both bookkeeping and accountancy.

The most serious hindrance, however, to the mastery of the technique of bookkeeping is due to a lack of a clear understanding of the reasons for the rules for debit and credit.

Some years ago, I had a personal experience in night school with a boy sixteen or seventeen years old, who was just beginning the study of bookkeeping by journalizing exercises in accordance with the rule-of-thumb method of arbitrarily using rules.

Among other exercises given in the text was one as follows: "Received a telegram advising of the destruction by fire of merchandise valued at $250.00, shipped to John Doe to be sold on commission." When called upon to tell what disposition he had made of the matter, he replied that he did not know what to credit, but that he had debited the telegram, in accordance with the rule that says, "Debit what is received," etc.

This same difficulty is more fully set forth in a footnote in Packard & Bryant's *Counting-House Bookkeeping* (ed. 1878, p. 42), as follows:

> Bookkeeping is usually presented as the "Science of Debit and Credit," and in order to give force to this short and easy definition, authors deem it necessary at the outset to establish fixed "rules for journalizing," or rules for deciding the debits and credits growing out of the transactions. These rules are placed at the very threshold of the subject, and the student is expected to apply them as a sovereign remedy in all his troubles.
>
> Undoubtedly these obtrusive little recipes are good for something. Like all empirical remedies, they may do in the absence of a knowledge of the difficulty, or "until the doctor comes," but they are, after all, very weak props to lean on, and are liable to break and pierce one through. It is better, in the long run, to look at matters as they

are. There is no "infallible rule for journalizing," no single formula that will apply logically and with equal force to the record of all transactions, and the attempt to simplify the work of journalizing by a rule without reason is not only a weak device, but works injury in the end.

Their method, however, of obviating the difficulty by providing a brief treatise on political economy, as an introduction to elementary bookkeeping, hardly improves the situation for the usual student of bookkeeping.

Professor Hatfield, altho he states in his preface to *Modern Accounting* that he purposely omits, or treats with scant mention, these important details of technique, makes some pertinent criticisms upon the use of the terms "debit" and "credit" which serve to throw light upon the subject. He says, that

the original meaning of debit and credit is still preserved in personal accounts. But the application of debit and credit to other classes of accounts is more difficult of explanation.

He further states that

by a forced system of personification [most writers] have assumed that debit and credit in all accounts . . . . show a relationship of debtor and creditor. . . . . The better theory rejects all of this personification and . . . . treats the two sets of accounts as representing two sets of value and meaning, in which debit and credit are used conventionally with differing signification; . . . . while it is true that most of the intervening authors present unquestioningly the naïve personalistic theory, it is interesting to note that Jones, who was the first, and Sprague, the latest and most penetrating, American theoretical writer, are thus in accord. And on their side are found many of the leading European authorities.

Debit and credit may each properly be said to have a primary, or literal, and a secondary, or extended, meaning. Their primary meanings have reference only to personal accounts. A person is a *debtor* when he owes for something which he has received on account; that is, without at the same time giving in return something of equivalent value. A person is a *creditor* when he is owed for something which he has given on account, without at the same time receiving in return something of equivalent value.

(NOTE.—A person receiving or giving something on account is, however, understood to give or receive in return a promise of payment implied or expressed, but not a note, or negotiable instrument.)

This has no reference to the side of the account upon which an item is to be recorded.

The secondary, or extended, meanings of debit and credit apply to personal and all other accounts alike and are properly used to designate merely the side of the account upon which a particular item should be entered. In the secondary sense, then, debit means left-hand side and credit means right-hand side, or briefly "left" and "right."

It does not seem advisable to try to revolutionize this conventional secondary use of debit and credit, but if due consideration be given the matter and a practical application of this idea be made by a temporary

use of the terms "left" and "right" it will be seen how much baffling confusion will be dispelled and the whole situation greatly clarified.

It must be borne in mind, therefore, that with reference to personal accounts these terms have both a primary and a secondary meaning. The primary meaning is inherent, the secondary meaning is adventitious and conventional, and might just as well have been reversed so far as practical results are concerned, provided the reversal had extended to all accounts. But the form of the personal account, the first established in the evolution of accounts, having become fixed by usage, conditions and determines the debits (or lefts) and the credits (or rights) of all other accounts. This is because of the correlation of all accounts when conforming to good technique by having their debits (or lefts) and their credits (or rights) correctly designated.

Every account may have two classes of items directly opposite in character; for example, a personal account may have a primary debit which is also a secondary debit (or left) by convention, and a primary credit, which is also a secondary credit (or right) by convention; cash account, an item of cash received which is a debit (or left) by virtue of its sustaining the same relation to its transaction as the debit (or left) of the personal account to its transaction, or an opposite relation to that of a credit (or right) item of a personal account; merchandise account, having for its opposing classes of items purchases and sales, should be similarly disposed of with reference to its debits (or lefts) and credits (or rights), and so with all other accounts.

The reference of debits (or lefts) and credits (or rights) to accounts is properly made to single entry in its cruder beginnings, as well as in its more elaborate forms. And since business transaction and quasi-transaction, or business fact, requiring representation in accounts, is dual in character, having its two phases or sides, opposite and equal, the complete and full representation of both sides of such transaction or fact by accounts marks the transition from single-entry to that of double-entry bookkeeping.

This determination of debits (or lefts) and credits (or rights) of the account fully representing both sides of every transaction, or quasi-transaction, is the very essence of so-called journalizing, and constitutes one of the most important of bookkeeping fundamentals. If this be thoroly and intelligently mastered by the learner, it will place him upon solid ground and assure his easy and rapid mastery of the details of bookkeeping technique, thus fitting him for the important work of constructing a correct balance sheet and loss-and-gain statement, which is an essential function of accounting.

That the reasons for debit and credit are not as fully understood and appreciated as they should be, seems to be borne out by what occurred at a meeting of the National Business Teachers' Association at Indianapolis,

Ind., December, 1908. A paper entitled "Bookkeeping for Beginners" had been read and was being discussed by a prominent teacher. At the close of his remarks, in which he had enumerated some very interesting methods used by himself, he was asked what reply he would make to a student who should ask: "Why debit cash when it is received?"

The several dubious replies given in response to a continued pressing of this question developed unusual interest; but the answer finally volunteered by a person in the audience and acquiesced in by the speaker, seemed not to be entirely satisfactory to all, judging from the many-sided discussions heard afterward.

At the annual meeting of this same body a year later, in Louisville, Ky., a more general discussion upon this same point disclosed a very great diversity of opinion. Possibly much of this diversity was due to the lack of a standardized terminology. Any essential diversity upon such an elementary point, in a body of teachers, coming together from more than two-thirds of all the states of the Union, is an impressive fact and seems to justify the criticism made in a publication referring to the discussion, that "evidently there is need among teachers for some instruction on the fundamentals of bookkeeping."

Since many controversies have been settled thru the disputants being led to agree upon definitions of terms, a plea is hereby entered that this, with other elementary points upon which there is essential disagreement, be critically examined and reported upon by a representative committee. Such committee should report its conclusions to a future meeting of this body for adoption, with or without revision, as may seem necessary. If practical agreement be not reached, let the report be again referred to the old or a new committee, until practical agreement is reached.

This is desirable not merely to facilitate the work of the student, but also to impress more fully upon the educational public the general training value of bookkeeping and accounting, in systemization, clearness of statement, mathematical exactness, and logical sequence of ideas.

Upon the other hand, they are vital to industrial and commercial progress. Even their temporary disuse would throw the business world into confusion. These, together with the other commercial subjects, including industrial history, not only do not totally displace the cultural subjects, but serve to give greater efficiency to business and commerce, "making possible all the marvelous products of master minds."

It has been truthfully said that "It is a fact that all of our modern history of culture is being written from an economic standpoint. Twenty years ago the Italian Renaissance was looked upon as a period of glory hardly likely ever to be reproduced in the history of mankind and impossible to be explained. Some of the best studies made of it since have shown that it was the outcome of the commercial position of Italy at that time."

TEACHING TYPEWRITING FOR THE BEST RESULTS

JAMES S. CURRY, HIGH SCHOOL OF COMMERCE, CLEVELAND, OHIO

The importance of a right beginning in anything that merits favorable consideration cannot be overestimated. This is especially true in acquiring a high degree of skill and efficiency on the typewriter. "A right beginning is the first essential requisite to success." "Well begun, half done." "The forming of correct habits at the beginning prevents discouragements, so disastrous to success." "A right beginning is but plodding at the start, while at the end of the course it assures both facility and efficiency," are familiar sayings with a true meaning.

In this day of active competition in the commercial world more is expected of our graduates than in former years. Along with the ever-increasing demand upon these young people comes the equally imperative demand upon the teacher for more efficient and effective service.

Our standard of efficiency as teachers will be determined largely by how nearly our graduates succeed in keeping pace with the requirements imposed upon them in the office. It is safe to predict that the teacher whose highest ambition is to draw his salary will accomplish little toward raising the standard of efficiency in the young people under his instruction. On the other hand, he who teaches because of his love for the work and the good he may render others will see success written upon the efforts of those whom he would serve.

The teacher of tomorrow must do a little better work than he is able to do today. Next year's work must be more successful than the last one has been. The teacher must be alert to the every need of the work in hand. He must know the subject he is to teach and the mental weakness and strength of every student under his guidance. He must be acquainted with the demands made upon the employee in the office, either thru the channels of actual office experience or close personal observation, that he may best aid the student in preparing to meet the practical problems before him squarely and successfully. If we would have our students work for high attainments, we must set a right example and do a little of the climbing ourselves. There are too many real students seeking an education to justify the tolerance of shams. It behooves us, therefore, to pause and reflect. If the teaching of typewriting is to gain the heights toward which it is aimed, we as teachers must serve our purpose well. May it be said of us, "Well done."

There are many elements that contribute to the successful teaching of touch typewriting. As the first of these essential elements I would suggest for every teacher and student the motto: "He can who thinks he can." This motto seems to embody confidence, determination, enthusiasm, a desire to get out of the opportunity everything of value there is in it, and implicit confidence on the part of both student and teacher successfully to

perform his part of the task in hand, all of which are essential to the successful teaching of touch typewriting.

Interest in typewriting should be aroused in underclass students. This may be accomplished in a number of ways. If the students in the typewriting classes are doing the high class of work that should be expected of them, every other student in the school will know it. An occasional typewriting demonstration before the entire school, participated in by the best operators from the typewriting department, will arouse much interest, and the effort may prove to be of inestimable value to the participants. A demonstration by a professional writer will show the greater possibility of the typewriter, and often arouse a determination on the part of students to equal if possible the record of the professional operator. In this way the underclass students may be made to look forward eagerly to the time when they will be allowed to take up the work of learning to operate the typewriter. When this time shall come, every student in the class, with utmost confidence in the ability of the teacher, will be ready and eager to carry out his every instruction.

It is an old as well as a true saying that it is a safe rule of education to begin with the easy and end with the difficult, to begin with the simple and end with the complex. I would apply this rule in teaching the keyboard of the typewriter, and begin with the index fingers. It is well known that the index fingers are more easily controlled than are the other fingers, especially the third and fourth. Altho the index fingers are required to perform double duty, fewer discouragements confront the learner who begins with these fingers. Then, too, if the fourth, or little fingers, are to remain on the guide or home keys, the a, and the semicolon, it is doubly essential that the beginning should be made with the index fingers. The second and third fingers should be introduced in turn, leaving the little finger to the last. By the time the alphabet is fairly well mastered, the little fingers should have become so accustomed to the guide-key positions that it would seem but natural for them to drop back into position after striking q, z, or p.

It is scarcely necessary to add that the feet of the operator should be in front of the chair; that the body should be erect, unsupported by the back of the chair; that the elbows should be slightly forward of a vertical line with the tip of the shoulder; that the forearm and back of the hand should be on a level; that the finger-stroke should be staccato—quick and sharp. These seemingly minor but all-important details should be zealously watched until the strong, iron grip of correct habits is well grounded.

A right beginning is the first essential requisite to the successful teaching of touch typewriting. If absolutely correct habits are formed at the beginning and adhered to thruout the course, typewriting can be learned in one-half to two-thirds the time usually required where wrong habits are formed. Wrong or faulty habits are most disastrous to the best interests

of the beginning student; the teacher should prevent them by every means at his command.

As a rule, tendencies toward wrong or faulty habits may be prevented by repeated personal reminders. The teacher must, however, be ready to meet every emergency that the exigency of the occasion may demand. For example, if necessary to keep the little finger on the guide key, loop a rubber band around the end of the finger and attach it to the end of the key bar; or, if the wrist is allowed to drop too low, it may be well to hold it in the proper position. The earnest, conscientious, painstaking teacher will find the need of such devices the exception.

The teacher should demonstrate every part of the work to be done by beginning students. A demonstrating stand for this purpose is desirable.

It is true that the expert typist operates the machine by almost if not quite a mechanical process. There is no seeming conscious effort at finger control. The finger action is the result of an unconscious response to the impulse of the mind; the result of a perfect subconscious, mental-muscular combination.

By the expert, mechanical manipulation of the keyboard is conceded. The beginner should be kept as far away from mechanical practice as possible. Preliminary exercises that require constant attention or study of the keyboard while the student is practicing them should be given. To write as a preliminary exercise:

rtyu
fghj
vbnm, or
asdfghjkl;

or similar combinations, invariably results in mechanical practice from the beginning and a retarding of the student's progress. Such exercises are disastrous to the best interests of the student and should be avoided.

Preliminary to the first practice of any part of the keyboard it is very important that the location of the letters, figures, and other characters, and the correct fingering should be thoroly memorized.

My students begin by memorizing the twelve index-finger letters, r t y u f g h j v b n m, which require but a few minutes. After the accomplishment of this task, the following exercise is first dictated slowly to the class and then practiced from copy:

FIRST-FINGER PRELIMINARY EXERCISE

fgftfbfrfv fgftfbfrfv fgttfbfrfv fgttfbfrfv fgftfbfrfv fgftfbfrfv
jhjyjnjujm jhjyjnjujm jhjyjnjujm jnjyjnjujm jhjyjnjujm jhjyjnjujm
gfgrgvgtgb gfgrgvgtgb gfgrgvgtgb gfgrgvgtgb gfgrgvgtgb gfgrgvgtgb
hjhuhmhyhn hjhuhmhyhn hjhuhmhyhn hjhuhmhyhn hjhuhmhyhn hjhuhmhyhu
fgjhtyfbjn frjufvjm fgjhftjyfbjn frjufvjm fgjhftjyfbjn frjufvjm
gfhjgrhugvhm gthygbhn gfhjgrhugvhm gthygbhn gfhjgrhugvhm gthygbhn

It will be noted that each combination has a central letter with which each of the other letters in the group is associated To write these combinations requires almost perfect concentration of the mind and invites a careful study of the location of the letters composing the group, while a regular, even touch is being developed.

After locating and memorizing the second-finger characters, e d c , k i, the following exercise is first dictated and then practiced from the copy:

SECOND-FINGER PRELIMINARY EXERCISE

dfdrdvdedc dfdrdvdedc dfdrdvdedc dfdrdvdedc dfdrdvdedc dfdrdvdedc
kjkukmkik, kjkukmkik, kjkukmkik, kjkukmkik, kjkukmkik, kjkukmkik,
fdfefcfrfv fdfefcfrfv fdfefcfrfv fdfefcfrfv fdfefcfrfv fdfefcfrfv
jkjij, jujm jkjij, jujm jkjij, jujm jkjij, jujm jkjij, jujm jkjij, jujm
dfkjdrkudvkm dekidck, dıkjdrkudvkm dekidck, dfkjdrkudvkm dekidck,
fdjkfejifcj, frjufvjm fdjkfejifcj, frjufvjm fdjkfejifcj, frjufvjm

After careful practice and a fair mastery of the foregoing, the third exercise comprising the characters w s x . l o and the fourth exercise comprising the characters q a z ; p are introduced in turn; these are as follows:

THIRD-FINGER PRELIMINARY EXERCISE

sdsescswsx sdsescswsx sdsescswsx sdsescswsx sdsescswsx sdsescswsx
lklil, lol. lklil, lol. lklil, lol. lklil, lol. lklil, lol. lklil, lol.
dsdwdxdedc dsdwdxdedc dsdwdxdedc dsdwdxdedc dsdwdxdedc dsdwdxdedc
klkok. kik, klkok. kik, klkok. kik, klkok. kik, klkok. kik, klkok. kik,
sdlkseliscl, swlosxl. sdlkseliscl, swlosxl. sdlkseliscl, swlosxl.
dskldwkodxk. dekidck, dskldwkodxk. dekidck, dskldwkodxk. dekidck,

FOURTH-FINGER PRELIMINARY EXERCISE

asawaxaqaz asawaxaqaz asawaxaqaz asawaxaqaz asawaxaqaz asawaxaqaz
;l;o;.;p ;l;o;.;p ;l;o;.;p ;l;o;.;p ;l;o;.;p ;l;o;.;p ;l;o;.;p ;l;o;.;p
sasqszswsx sasqszswsx sasqszswsx sasqszswsx sasqszswsx sasqszswsx
l;lplol. l;lplol. l;lplol. l;lplol. l;lplol. l;lplol. l;lplol. l;lplol.
as;law;oax;. aq;paz as;law;oax;. aq;paz as;law;oaz;. aq;paz as;law;oax;.
sal;sqlpz swlosxl. sal;sqlpsz swlosxl. sal;sqlpsz swlosxl.

The learner should be taught to strike the punctuation marks with a touch sufficiently light to prevent their cutting or puncturing the paper. The failure to do this from the time of their first introduction is one of the common faults of teaching. The cutting thru of the punctuation marks is disastrous to the neat appearance of the typewritten page as well as to the life of the platen.

The foregoing preliminary exercises, especially designed for beginning students, may be made exceedingly helpful to advanced students as supplementary exercises. Their continued practice aids materially in the mastery of the keyboard. The third and fourth finger combinations prove especially helpful in the development of the weaker fingers.

In addition to the preliminary-supplementary exercises, may be introduced the alphabet exercise which consists of placing each of the vowels, a, e, i, o, and u, both before and after every other letter of the alphabet, as follows:

abacadaeafagahaiajakalamanaoapaqarasatauavawaxayaza enunciation
eaebecedefegeheiejekelemeneoepeqereseteuevewexeyeze unauthorized
iaibicidieifigihijikiliminioipiqirisitiuiviwixiyizi unaccomplished
oaobocodoeofogohoiojokolomonopoqorosotouovowoxoyozo authoritative
uaubucudueufuguhuiujukulumunuoupuqurusutuvuwuxuyuzu simultaneous

With the exception of the pronoun "I," the article "a," the interjection "O," and one or two other words, every word in the language contains at least one consonant with a vowel, before or after, or both before and after it. This exercise, then, provides a drill upon every possible vowel-consonant combination. Combinations in this and other exercises that are particularly difficult to write should be practiced until every part can be written with equal facility.

Common words, such as are to be found in the textbooks, should be introduced following each of the foregoing exercises. Sentences for speed practice should be introduced as soon as the student's knowledge of the keyboard will permit.

The course thus far outlined will cover about six months in a high school and two months in a business college.

Practice matter should form the principal part of the work for the first year. Its scope, however, should be broadened so as to include, in addition to words and sentences, paragraphs of one hundred to five hundred words, technical as well as simple composition.

A definite work should be outlined for each and every day, and late in the first year or early in the second should include both practice and new matter. The work outlined should comprise sentence practice and timing on the same for one, five, ten, or twenty minutes; a paragraph of about one hundred words, timing for one minute; once or twice a week, timing on one or more of the numerous speed sentences and paragraphs; new matter for one, five, ten, and fifteen minutes, deducting five words for every error. Emphasis should be placed upon accuracy in every part of the work. In speed work I would discourage the recognition of anything but absolutely accurate work. Errors cannot be prevented, but the clamor for high speed at the sacrifice of accuracy may be discouraged by placing a premium upon accuracy. The course should be concluded with a great deal of office practice work, including the copying from shorthand notes as well as from the printed page.

Whatever may be our method of teaching touch typewriting, let us remember that "He can who thinks he can," and that our students never attain a higher goal than that at which we as teachers aim. May it be said of us, "Well done."

BUSINESS ENGLISH—WHAT? WHY? HOW?

SHERWIN CODY, DIRECTOR OF THE SCHOOL OF ENGLISH, CHICAGO, ILL.

Few people clearly understand the exact difference between business English and literary English (such as is taught in all regular public-school English work).

WHAT?

Business English deals with facts only, which must be stated absolutely clearly, and with strong emphasis. Guess work is fatal. Literary English deals with emotions, impressions, abstractions, arguments. Ease and grace of style are essential, while fancy and imagination stand higher than hard facts. Excessive emphasis is in bad taste.

Business sentences are short and simple. Literary English allows long, rolling sentences.

Business English represents good conversation, and colloquialisms (even slang if not touched with vulgarity) are absolutely required to give personal force of appeal. The standard of purity in literary English is based on book usage. The standard of purity in business English is based on effective conversational usage in the everyday affairs of life.

WHY?

Only a business man instinctively realizes the absolute necessity for dealing only with facts, employing excessive emphasis, and using colloquialisms or slang.

Therefore the first great necessity is to learn and teach how to do business—how to deal with human nature with tact, directness, simplicity, and force. The ordinary person (the customer) is quite different from the school teacher, whose mind is spoiled by the habit of child-driving, so that it doesn't understand how common people are led.

HOW?

You will never have any success in teaching business English unless you first teach business and how to handle human nature (salesmanship)—that is systematic common-sense and good nature.

a) Daily practice.—You must have practice every day, or at least four days out of five. But no teacher on earth can correct twenty or thirty papers a day (to say nothing of fifty or seventy-five) so it will do any good. The successful daily composition, therefore, requires a system by which the subject-matter is supplied, but the wording must be original. Then the recitation becomes one long, thoro, effective criticism of good and bad wording for this subject, and pupils are required to correct their own papers and report their own marks. This develops responsibility and compels attention better than anything else. Monthly examinations help to check up results.

b) Grammar is disliked by the average pupil, and teaching it does little good except as pupils see the usefulness of it in helping them make their composition more correct. Start with composition. Leave grammar till later. Teach it by calling for rules or principles governing the correction of errors in the composition work. Or after a month of composition, give an examination on grammar (for the purpose of excusing those who pass it), and then give one lesson a week (no more) along with the composition. A good examination convinces many how little they know. But it is fatal to try to begin with teaching analysis, before you have concrete problems to analyze.

c) Letter-writing is in all school curricula and is supposed to be taught in the seventh and eighth grades. Business English is simple English —the simplest, just as talking is simple.

But teachers who have never been taught themselves cannot teach letter-writing so as to make anything of it. Simple things are hard to handle—the simpler they are the harder they are—and when a teacher consents to teach a naturally simple subject like business English without any preparation and without any system, failure is certain.

Get a good book (there are so many bad ones it is not easy to find a book that a real business man would tolerate in his office for one moment) and above all a good collection of real, high-grade business letters, circulars, and advertisements—not the kind that are dictated offhand by a cheap clerk but such as have been studied for hours by successful business managers and skilled advertising specialists. They alone write business English worthy to be set up as a model; yet teachers are constantly taking real letters out of current files—letters that are often full of errors of grammar—which are to real business English what the most slipshod newspaper reporting is to standard literature.

SUMMARY

1. Teach how to do business—that is, common-sense in dealing with human nature.
2. Insist on daily composition drills, and get a system which makes that possible.
3. Make grammar a criticism of composition work, subordinate to composition, when pupils have been made to feel the need of it.
4. Above all, don't confuse the slipshod, inaccurate, current letter-writing with the masterpieces of educated business writers, which alone are the best models.
5. Recognize business English as a great subject, worthy of profound study, and don't be afraid to follow the lead of a business specialist, someone who has really done business and who knows the subject practically and not merely theoretically.

DISCUSSION

Question: Would you advise a continuous course in business English at some point in the course, or perhaps one hour a week over a longer period?

MR. CODY: I am strongly in favor of a continuous course in the very first year. Business English is simple English, and I believe it ought to be good for all pupils in the high school. It can be made harmonious with the regular English, and will tend to make that English more effective.

Question: Would you intrust this work to one of the regular teachers of English, or have a special teacher for it?

Mr. Cody: If you want to get marked results you will probably have to have a special teacher. The trouble with the ordinary teacher of English is that she is usually first of all a teacher of literature—she likes to teach literature and she doesn't like to teach composition of any kind; and a careful report of conditions as they were actually found to exist in the Illinois high schools by a committee of the Illinois High-School Teachers Association showed that on the average composition was receiving considerably less than its allotted time, simply because the literature and the composition were taught together, and if the work in literature became too absorbing the work of composition got crowded out. Perhaps you can find a teacher of bookkeeping or a teacher of shorthand who is an enthusiast on the subject of business English and knows something about it. Such a teacher will get far better results.

Stephen H. Dwan, head of commercial department, Broadway High School, Seattle, Wash.—The great word in business English is naturalness. If the pupil can learn to be natural and write in simple language that which he really knows, he will probably be successful.

Our greatest difficulty lies in the fact that the pupils when they come to us know so little about business that they cannot express themselves at all effectively on a business subject. For that reason we do not introduce the subject of business English until the second semester of the second year. Then the pupils begin to know something about how business is done, so they are able to express themselves more intelligently in letters.

We make them rewrite a letter many times. There is no other way in which it is possible to get results except to require the repeated rewriting of letters offered as exercises.

I think you will find it absolutely necessary to have a teacher who is a specialist on business English if you want to get results.

Benjamin Ide Wheeler, president, University of California, Berkeley, Cal.—I am glad that emphasis has been laid on the statement that business English is simple English, for I believe that simple English is the most important thing for us to teach in the high schools, and we have got lost in a maze of literary study. This literary study has become a fetich with us, and I regard this fetich as our greatest educational incubus to-day.

It has been said that Greek was our great incubus, but it is no longer so. Nobody pays any attention to Greek any more. Nobody has to take Greek any longer if he does not want to do so.

Of course it is necessary to teach writing English, but it is infinitely more necessary to teach oral English, for we all have to talk and few of us know how to talk. If business English will promote the effective study of oral English, it is something we ought to give to every pupil, in every high school—it is the kind of English that we are at present most in need of in our schools.

Unfortunately, however, many writers of business English seem to think that those set, cant business phrases with which so many business letters open and close are the very essence of business English. They are in reality a dialect, like baseball slang, which many people do not understand and which ought to be eliminated completely. It ought to be considered a crime to close a business letter with "Thanking you for your," etc.

The so-called lies of the newspaper reporters when they try to report what we say are not really lies at all, but are due to the fact that the reporters do not hear very clearly and afterward in trying to think out for themselves what we really said they obtain as a result something we had no intention whatever of saying. If we were trained to talk better, and they were trained in oral English, a great many of the misstatements in newspapers would be avoided.

COMMERCIAL–ECONOMIC GEOGRAPHY

C. W. CHILDS, MANUAL TRAINING AND COMMERCIAL HIGH SCHOOL, OAKLAND, CAL.

It is usually assumed by the majority of people that the curriculum of schools represents the patient thought of generations of teachers, and that it is a gradual accumulation of subjects which must be mastered in order that one may be educated. In a business school, especially, each subject is supposed to be a necessary part of a student's equipment for active work in the world.

We are discovering that the graduates of our grammar schools and high schools are, as a rule, not fitted to enter readily into any of the active duties of life. In many ways they are deficient, not only in practical scholarship and ability to work out business problems, but also in good business habits. We are now scrutinizing our curricula carefully with a view of eliminating undesirable subjects and bad methods of study and teaching, and of substituting work of a more practical character, presented in such manner as to train the student to think, to work out by and for himself many business problems. We find that we are spreading out over too much surface and not delving deep enough. The majority of pupils from the grammar schools who enter my geography classes do not want to work, do not know how to work. They want to be entertained and amused. Perhaps some of these bad characteristics are the result of "feminization"; many, yes, most of these pupils have never had a male teacher.

There was a tendency a few years ago to drop physical and commercial geography from courses of study in high schools, and business colleges seldom gave any time to the discussion of these subjects. Considering the subject-matter of the old textbooks, and that teachers without any special preparation in geography were assigned to teach these subjects, the omission of physical and commercial geography was not very hurtful to the student. Each subject in a course of study ought to gain and hold its place because a reasonable mastery of it is a part of the student's equipment for an active part in the world's work. It must assist in training him to think and to accumulate a fund of desirable knowledge. Physical geography is now very properly in the curriculum of our best high schools, for the new textbooks have a much fuller treatment of life in relation to land, air, and ocean, the human interest of each being emphasized. The best of these new books are far from perfect, but as they are written and taught they serve as a basis of considerable commercial geography and some history and economics. Where possible, physical geography should precede commercial geography in the course of study. Physiographic influences must be recognized as important factors in shaping human affairs.

In the case of commercial geography less progress has been made in

preparing proper textbooks and in presenting the subject in an interesting and practical manner to the student. Writers of textbooks differ considerably in regard to the nature and the scope of the subject-matter. Many commercial geographies are largely commercial statistics—a mass of unrelated facts which the student is not asked to interpret. Probably one of the best of the new textbooks on commercial geography is Robinson's. It treats the subject scientifically and leads the student to think and to interpret. The author has blazed the way for better books on this subject. He says, "Commercial geography is the study of the localization of industries, and the three governing factors are the natural, the human, and the economic." His treatment of transportation is good but might profitably be amplified. Transportation has much to do with all kinds of production—agricultural, mining, and manufacturing. The Gregory-Keller-Bishop *Physical and Commercial Geography* is an excellent book for the teacher.

The subject-matter to be used and the methods of instruction will vary with the location of the school and its condition. A school fully equipped for this work will have a museum of products and models systematically arranged, and a classroom with maps, charts, globes, pictures, and library. In such a school you can use the topical method of instruction to the best advantage, as all these appliances constitute the textbook. In other places with meager helps you must depend largely upon a good textbook supplemented with such talks and illustrations as you may be able to give.

Perhaps an account of what we are trying to do in a small, old building (we have just voted $600,000 for a commercial and polytechnic high-school building) will explain my conception of the nature and scope of this subject. Each student has a copy of Robinson's *Commercial Geography* and several notebooks and map paper on which are printed outlines of the continents and various countries. Geological formation, topography, soil, and climate are the foundations of our threefold division of geographical work—production of raw material, manufacturing, and transportation—the human element being an important factor. My classroom has double window shades so that it can be darkened for stereopticon pictures. I have several hundred lantern-slides, many of which I have made and others I have caused to be made to illustrate various phases of production, manufacturing, and transportation. When I want only outlines or diagrams, such as may frequently be found in newspapers, magazines, and books, I place a small sheet of gelatine paper over the diagram and make a pen copy on the gelatine paper. Place this pen sketch between two pieces of lantern-slide glass and bind the edges with prepared binding material. These stereopticon views are not used for amusement or entertainment, but they constitute an important part of the recitation and must be discussed and interpreted just as we discuss and interpret the facts stated in the textbook.

We have views of typical harbors in various regions and they are studied

with reference to present conditions and to natural and artificial changes in the processes of evolution. By natural changes I mean the shallowing of harbors thru the action of rivers, tides, etc., and by oscillation of sea level. By artificial I mean the dredging, building sea-walls, wharves, piers, docks, etc. We make a special study of harbors that we can visit, such as San Francisco and Oakland. Before visiting our home harbors we study by pictures, slides, and textbooks the work done and now being done on the best barbors in the United States and in Europe. Errors in planning and constructing, and in various forms of graft, have caused the waste of millions of dollars. If our high schools had studied this one subject as we are now pursuing it I think much of this wasted money might have been saved, for harbor boards and employees are graduates of our schools.

We are now giving talks on many of these commercial subjects in the highest grades of our grammar schools. Each school building has a room that can be darkened and a white screen as a background for lantern views. All of these rooms are furnished with electrical appliances for lantern use. I have a valise constructed to hold a lantern, slides, etc. When a talk is needed I pack my valise, ride over to the school, connect my lantern with the electrical switchboard, darken the room, and touch the button. We find these illustrated talks very interesting and instructive to pupils. We shall give these talks to the parents of these children as there is a demand for them. All of our new grammar buildings have large assembly rooms for public use.

We have slides of the great canals, showing their construction and use, and the maps thrown on the screen show why they were built. The Suez and the Panama Canals are studied with regard to the probable influence upon all kinds of work on this Pacific Coast. The vast expenditure of money contemplated by our national government in deepening rivers, making an inside waterway along the Atlantic side of the United States, building breakwaters, dredging, making dams and canals for irrigation, etc., are clearly illustrated in these stereopticon views. If these lessons had been given fully and clearly in all our schools as we are giving them, many of the errors and grafts of congressional appropriations might have been avoided. We have slides illustrating the various phases of conservation.

One set of slides shows the cause of the recent famine in China. The destruction of forests on several thousand square miles of territory in the mountains and hills along the upper courses of the tributaries of the great Chinese river caused the soil of these regions to be washed away and carried by great floods, which were formerly prevented from occurring by forest covers, down into the valleys, aggrading the river-bed and spreading destruction to farming lands and crops by the overflows of the river. Other slides foreshadow similar conditions and results in our own country.

Slides showing the evolution of ship-building and other agents of transportation, and of agricultural, mining, and manufacturing machinery throw

considerable light upon the rapid spread of civilization in recent times. We have slides of birdlife, insects, and other animals, showing their economic relations to agriculture. Every phase of physical and of commercial geography may be shown with stereopticon views. We shall use moving-picture films soon.

Excursions to inspect ocean and river vessels, warehouses, shops, manufacturing establishments, and public works are made occasionally and the students make written reports for class discussions. We use the commercial pages of our large daily newspapers and the student learns to interpret these condensed reports.

Some talk about the "gift of prophecy." This is an error of expression, for prophecy, the ability to foresee, to forecast, is the result of intelligent study, correct observation, and practical experience. I know of no other study that so fully endows the student with the true spirit of prophecy.

This is a very large subject, and in the short time given to its study in our school we try to present the subject in such manner as to give the student a little taste *of* it but a considerable taste *for* it.

SHORTHAND—ITS EDUCATIONAL AND PRACTICAL VALUE

GEORGE ARCHIBALD CLARK, LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

I wish this morning to make a plea for a more general recognition and a wider use of shorthand as a means of writing. By shorthand in this sense I do not mean any particular form of phonography, stenography, brachygraphy, tachygraphy, aristography, or any other -ography. I am not advocating the Pitman system, the Graham, the Munson, the Longley, the Cross, the Gregg, or any other mere system. My interest is in shorthand as a form of language representation, briefer and more facile than longhand and hence capable of saving time and labor to those whose business it is to write.

Shorthand is no new thing. It was used in the days of Cicero. It is supposed that St. Paul dictated some of his epistles to amanuenses skilled in its use. In the days of St. Augustine a church assemblage in Carthage used eight stenographers to record its deliberations. The emperors Titus and Charlemagne were proficient in the art. A working system of shorthand, adapted to English, was published in London by Timothy Bright in 1588. Mr. J. Ensign Rockwell in his monograph on shorthand, published by the Bureau of Education in 1893, enumerates over 600 forms or editions of shorthand which had been published to that date from the time of Bright.

The history of shorthand is a long and interesting one. I do not, however, intend to dwell upon it beyond pointing out by these recorded facts its antiquity. Wherever the need of recording spoken utterance has

been felt, some form of shorthand has been invented and used to meet the need which ordinary longhand has failed to meet.

It was in 1837 that shorthand in its most popular modern form was invented and published by Isaac Pitman, of Bath, England. The intervening period has been the most important of its history and has seen the art placed upon a firm and practical basis. Coming into existence as a medium of recording spoken utterance, its early place was in legislative halls, in meetings of learned societies, in courts of law, and other assemblages, where discussions, debates, and original records of any kind were to be preserved. It still holds this very important place, but in the past quarter of a century the art has entered the field of business and has revolutionized the whole method of business correspondence.

Everyone is familiar with the stenographer's place in the business office. It is an important, nay, an indispensable one. The business man could no more get along without his stenographer than without his telephone or the telegraph. The United States census of 1900 shows 112,000 men and women engaged in the occupation of stenography. The census of 1910 will show a vast increase over these figures.

The basis of this occupation rests in the skill of the stenographer to write at a rate of speed far in excess of the possibilities of longhand. The business man talks his letters instead of writing them out laboriously by hand. The stenographer records them in shorthand and transcribes them in print on the typewriter.

But the business man has no monopoly on this need which the stenographer meets. His mother, wife, daughter, all his relatives, male and female—the rank and file of humanity who write and receive letters—experience the same need. Each individual cannot have a stenographer at hand, but each individual, by possessing this more brief and rapid form of writing, can be his or her own stenographer. The art which saves time and labor to the employer will also save time and labor to the individual.

We have not confined the use of the telephone to business matters —to communications between business men and business houses. We have taken it into the home and the club and have utilized its services in all social and friendly as well as business intercourse. The same is true of the telegraph, forms of rapid transit, and labor-saving devices of all kinds. Why should we limit the usefulness of shorthand to business?

When we consider the number of business men who find shorthand a necessity, the great body of teachers who offer instruction in it, and the army of workers who earn their daily bread by its use, it seems strange that so little progress has been made in its adoption for individual and general use. The reasons for this are, however, simple. In the first place, our longhand writing is virtually inherited. Thrust upon us in our infancy, when we have not yet learned to distinguish between good and bad in matters of writing, by the time we have attained years of discrimination

longhand has become a fixed habit. The cumbersome characters thru long use have become automatic, reflex, like the efforts of breathing and walking. We realize the inadequacy of longhand but vaguely, if at all. If we are in business, we employ a stenographer. For the rest we accept the situation as a matter of course and pass on to our children the same heritage of toil and strain of eye and nerve which the acquisition and practice of longhand means to all who write.

If the teachers in our public schools were engaged in teaching adults a form of writing that was five times as slow and difficult as another form of writing well known and in constant use, there would be rebellion and revolution. It could not be done any more than the farmer of the present day could be induced to harvest his grain with the ancient sickle, or the newspaper to set its type by hand, with the self-binding harvester and the linotype available. But our teachers are dealing with children who have no effective means of self-defense. We have laws against child labor, but they apply to the factory and the sweatshop, not to the schoolroom.

In the second place, those who use shorthand, and hence are in a position best to understand its possibilities, look upon it as a tool, like the typewriter and the letter-file, strictly for office and not for personal use. This attitude of mind is expressed by the proverbial wisdom which says that "It is ever the children of the cobbler that go poorly shod; the roof of the carpenter that leaks."

But even if the public were keenly alive to the possibilities of shorthand and practical stenographers aggressively active in extending its use, we should still encounter difficulties. The current presentations of shorthand appear as textbooks of two to three hundred pages. The grammar of a language or a treatise on mathematics is scarcely more formidable. The subject-matter of shorthand is amplified in divisions, chapters, sections, with dissertations on the laws of sounds and the philosophy of speech. There are tables of logograms and gramalogs, word-signs, and contractions. The consonants are no longer mere letters, they are grouped as explodents and continuents, with subdivisions into frictatives, nasals, and linguals. Rules and exceptions, devices and expedients are multiplied without number. In a word, the system is developed into an intricate mechanism to meet the extreme needs of verbatim reporting. The relation of the art as a method of writing is wholly lost sight of.

Then, too, the stenographer working as he does at high speed writes a form of character which he can translate only with difficulty. One stenographer can rarely read another's notes. The general impression the layman gets of shorthand is that it is a highly specialized form of writing available only to experts and beyond the reach of ordinary mortals.

Furthermore, there is a constantly increasing series of new versions of shorthand. There are more than two hundred forms of the art more or less current in the country. At least seven of these—the Isaac Pitman,

the Benn Pitman, the Graham, the Munson, the Longley, the Cross, and the Gregg—claim the dignity of distinct systems. The writers of one of these systems, as well as of any one of the many subdivisions of the first five, cannot read the notes of writers of the other systems. The shorthand situation is therefore a babel of confusion. The emphasis is on system, system, and not on the art itself.

This looks like a hopeless tangle, and it is a deplorable tangle, but by no means a hopeless or even difficult one. There are really but two forms of shorthand—the Pitmanic, which takes its fundamental characters from the arcs and radii of the circle; the other the Gregg, which takes its characters from the ellipse. The two hundred or more varieties of Pitmanic shorthand are all in reality but one, having a common alphabet. All the confusion and variety among these forms lie in the ways and means of adapting the fundamental characters to the task of verbatim reporting. Furthermore, 90 per cent of all the users of shorthand follow the Pitmanic alphabet.

I should like to point out here the difference between the professional use of shorthand, as illustrated in the practice of the stenographer, and the amateur use which I wish to advocate. The making of a stenographer is a different thing from the making of a mere writer of shorthand. The former means the training of an individual to take dictation at the rate of spoken utterance. It is the training of the race horse as against the training of the draft or driving horse. We talk easily. The tongue has been apprenticed to its task from birth. We write comparatively little and that with extreme difficulty. Part of this difficulty is due to the inconsiderable amount of practice the hand receives, much of it to the cumbersome medium in which we write. The result is that the hand is no match for the tongue. To put it concretely: we can talk easily at the rate of from one hundred to one hundred and twenty-five words per minute; we can write in longhand no more than twenty to twenty-five words per minute. The stenographer must be trained to overcome this inequality, and the task is difficult. He can accomplish it only by long and severe practice and by sacrificing every superfluous character, every superfluous motion.

The mere substitution of shorthand for longhand as a means of writing is a much simpler thing, as the training of a driving horse is a simpler thing than the training of a racer. It means merely placing in the hands of the writer a simpler and more facile form of character. Longhand writing is based upon an alphabet of twenty-six characters, capable of being joined in a running script. Shorthand is likewise based upon an alphabet of characters. They are forty in number because it is a phonetic alphabet, which the alphabet of longhand is not. I need not point out the advantage of a phonetic alphabet. Take the word "bought." There are three simple sounds in it, but six letters are used to express them—the

labor of writing increased 100 per cent for no purpose. Each character of the shorthand alphabet stands for a single sound. The consonant characters join readily and the vowels are written in various positions about them by means of disjoined dots and dashes.

Each character in the shorthand alphabet is made with a single motion of the pen. In longhand, the simplest letter, the letter *e*, requires three distinct strokes—an upward right curve, a downward left curve, and an upward right curve. The most complicated letter, *m*, requires seven strokes. I need not enumerate them. The average number of strokes for the entire alphabet is four and one-half pen movements for each letter. On a basis of mere substitution of alphabets, shorthand gives a clear saving of seven-ninths of the labor of writing. The actual saving thru the phonetic use of the shorthand characters is considerably greater.

To put this matter again in concrete form, consider for a moment the writing of the word "thought." It is a somewhat extreme case, but fairly typical. There are twenty-five distinct pen movements necessary to its writing in longhand. It contains three simple sounds, requiring three simple strokes in shorthand. By a simple device in shorthand this labor can be reduced to two strokes, by making one stroke one-half its natural length. The representation of the word "thought" in longhand is twelve and one-half times as difficult as in shorthand.

If a transportation company, a manufacturing plant, or any other business organization could save seven-ninths, to say nothing of eleven-twelfths, of the time and labor in any of its operations, how quickly the opportunity would be seized upon! What are the 112,000 stenographers recorded in the census of 1900 paid for? Merely to effect this saving in time to a certain class of men. Is the time of other men and women of no value, that it should be wasted in drudgery which the business man pays, and pays liberally, to avoid?

The complete form of shorthand, which I am proposing to substitute for longhand, is not something new or apart from that which the stenographer uses. The beginning of his training is all done in it. It is thru the complete representation of the commoner words of the language in what is known as the corresponding style of shorthand that the stenographer acquires the ability to read his reporting notes. The discarded vowels and omitted consonants must be read back into the skeleton outlines, and experience alone makes this possible. What I am proposing, therefore, is to have this corresponding style of shorthand made a working substitute for longhand.

The Pitmanic alphabet, because of its wider use—it is the common heritage from its inventor to fully 90 per cent of all the users of shorthand—is the tried and tested basis on which this subject can become a part of the general educational scheme. The place for the work is in the sixth, seventh, and eighth grades of our public schools. Boys and girls at that

age are best adapted to the work. Few boys, at least, pass thru that age without inventing some form of secret writing resembling shorthand. Reading and writing by means of the ordinary alphabet will have been acquired, eliminating possible confusion from the phonetic form of shorthand. Longhand penmanship is still a subject of practice. The routine movements and drills would be practically the same for the new form of writing. The work of instruction would be taken up very gradually, covering a period of three years. The intention would not be to discard longhand. That can come only when we adopt a phonetic alphabet for our printing. Longhand would remain, but as a luxury, not a necessity. Those preferring it could use it, just as those who prefer walking or the horse as a means of locomotion are at liberty to use them, eschewing the steam cars or the automobile.

What I am suggesting is not the infliction upon the pupils of the sixth, seventh, and eighth grades of what we know as the technical training of the stenographer. It is merely the task of learning a new alphabet of forty characters and some simple rules for its use, the whole thing not exceeding in complexity or extent the present instruction in longhand penmanship. The practice like that of longhand would be on the two or three thousand common words, the vocabulary of those grades and of ordinary intercourse. It is a fact that 2,000 of the most common words of the English language can be written and are written, even by the most expert stenographer, with no other principles of shorthand than those comprised in the simple alphabet.

To introduce this work would not require special or technical training on the part of the grade teacher—merely the mastery of the same forty signs and the same simple rules governing their use, with oversight in their application. A brief period of fifteen minutes a day or an hour a week would suffice.

This early introduction of shorthand would also have an important bearing on the professional acquisition of the art. This work is now given in the high schools, where it should remain. Every high-school teacher of shorthand knows that his or her one supreme task is the development of speed. Simple and easy of execution as the shorthand characters are, they are new and confusing. There is none of the automatic, reflex control which the pupil has of longhand. The rules governing the attainment of speed are complex. Shorthand is unlike other subjects in that all its rules are in use all the time. Five hundred words of general dictation will call them all into play, and in two or three hours' dictation the whole scheme will be revolved over and over again, with endless variety. It is this repetition that tends to fix the rules and make phenomenal speed possible, but in the beginning it is a bewildering process. The difficulty lies in the attempt to accomplish here in a few months what has been accomplished thru long years in the case of longhand. It is as if an athletic

trainer should attempt to bring a raw team into shape for an interschool meet in a few weeks. It requires a whole year to prepare for the running and jumping events, and fortunate is the trainer whose material has had years of previous training and experience.

Then, again, the other work of the high school is chiefly directed along another line—the development of powers of observation, reflection, reasoning, selection, discrimination. The pupil has passed the stage of response to mere authority. He wants to turn the dictation practice into a debate as to better and best ways of doing things. This frame of mind must be broken up before progress in speed can be begun. In the case of the class seeking speed in shorthand writing, as in the case of Tennyson's Noble Six Hundred, it is action, not reasoning and debate, that is called for.

The early introduction of shorthand in its simpler aspects into the grades would eliminate this difficulty and lay a foundation for more rapid advancement in the professional side of the art when the high-school work is reached. On this ground alone, if no thought of possible introduction of shorthand as a means of general writing entered into the matter, it would be the part of wisdom to begin the work of instruction and practice on the alphabet of shorthand in the grades.

I have purposely left little space for the purely educational value of shorthand. This has been emphasized over and over again. I yield to none in appreciation of its disciplinary value. An adequate course of instruction in the art is a liberal course in English. Such a course enforces in an effective manner attention and concentration. It quickens the senses of sight and hearing. It compels prompt decision and instant action. These are elements of the highest educational value.

This is the age of manual training. Shorthand is a form of manual training. The hand and brain are trained together. The effort to gain speed, to equal the rate of a speaker, has the inspiration, the fascination, of the racing contest in it for the young. And there is the accompanying art of typewriting which is pure manual training. A room full of typewriters would be as attractive to the boy or girl of the sixth, seventh, or eighth grades as a room full of benches and tools, and the boy or girl who is going out into the business world has as much right to such training as the boy who is going out to a trade has to the training of the workshop with its tools.

But I need not emphasize these things. I want to end as I began, with the individual point of view—every boy and girl, every man and every woman, his or her own stenographer. A very small fraction of time at the proper point in our educational system will make this possible. The time so devoted to the art of shorthand will return in after life a hundred fold in saving of time and labor.

CURRICULA FOR HIGH SCHOOLS OF COMMERCE IN THE UNITED STATES

CHARLES H. MURPHY, PRINCIPAL, COMMERCIAL HIGH SCHOOL, SAN FRANCISCO, CAL.

A discussion of courses of study for high schools of commerce, without limitation to some special division of the work, cannot lead to any definite results. In discussing this subject, I shall confine myself exclusively to the secondary schools, taking it for granted that the problem of the university course has reached a definite solution, and that the subjects and the methods of presenting them in the business-college course are likewise well established.

The scope and character of the work of the schools of commerce are not clearly worked out. Schools in the centers of international trade need a curriculum different from that which is needed in an agricultural, mining, or manufacturing community, or in cities where the trade is largely local. They must have ideals kept prominently in view, such as the training and development of intellectual power, as well as the application of that power. We have inherited two distinct ideals which have existed from time immemorial, the classical or academic and the practical or utilitarian—the one educational but not useful and the other useful but not educational. The general trend of the public mind is that those subjects which possess the greatest utility have the greatest value in the affairs of life. If this doctrine is carried to extremes our vocational schools might degenerate into a factory for bookkeepers and stenographers or clerks.

Our courses of study for secondary schools of commerce must be educationally sound if they are to win the respect of educators as well as of the business community. They must be made flexible and not confined to hard-and-fast lines. These should be constructed on broad lines so that pupils may elect or select one that will best prepare them for the duties of life. They should be broad enough to embrace several co-ordinate courses, allowing some degree of freedom in the selection, so that a diploma of graduation from one course would be on a par with the others. They should be something more than preparatory courses for college. Many young men and young women have neither the desire nor the inclination for a college education, but still want the best possible training they can secure to prepare them for the duties of life. From an eminent authority I quote the following:

> Only 3 per cent of those who enter school go farther than the eighth grade, and only three in every thousand graduate from the high school; less than 16 per cent of the total enrollment enter the high school; less than 7 per cent of this number graduate from the high school; about 2 per cent of the total enrollment of the high school take a college, university, or professional course in the higher institutions of learning.

In view of the foregoing, it seems manifestly unfair to require all students to take a special course for college admission when but 2 per cent

expect to enter college. More consideration should be given the large majority that must immediately enter upon the duties of life. We should have finishing schools as well as fitting schools, inasmuch as the great majority of students end their school career with the high school. While I am in full sympathy with college-preparatory courses in all our secondary schools, provision should also be made for the great majority of our young men and women who, by force of circumstances, are unable to enter the higher institutions of learning. Our boys and girls should be prepared for getting along in life rather than getting along in college.

The curriculum for our high schools of commerce should aim to give a certain amount of culture work for mental discipline, a working knowledge of stenography, typewriting, and bookkeeping, an elementary training in economics and business organization, and an opportunity to acquire some technical knowledge of particular lines of business which would constitute "the essential mental tools for the business man." A good deal of freedom should be allowed during the last year in electing a group of subjects devoted to a special field, particularly if the student does not intend to enter the college or university.

The School of Commerce and Finance in New York City is unique in itself. While it is intensely practical and narrowly vocational, it is essentially a professional school. Its curriculum covers five years of work, and the minimum requirement for admission to this school is graduation from an accredited high school. Most of its students are already engaged in some business occupation and are seeking better preparation for the affairs of life. Its teachers are practical men in similar lines of work in which they give instruction.

The Central High School of Commerce in Philadelphia has a strong, practical vocational course. It is constructed on altogether different lines from that of the New York institution and articulates with the higher institutions, the college and the university. The general plan and scope of its work may be found in the suggested curriculum for high schools of commerce in the United States by the Committee of Nine, National Education Association, to which that on the following page is similar.

There are many other excellent courses of study provided for giving instruction in higher commercial education in the United States, but the ones given are typical.

To cover the entire field of public commercial education, three distinct kinds are necessary: (1) for those who can afford but one or two years to complete their preparation after leaving the grammar grades; (2) for those who can afford to spend three or four years; and (3) for those who can give additional years to higher training in the higher institutions of learning. The best interests of the community and of society in general demand this special training all along the line.

Schools of commerce must have the spirit of business life, or they will

CURRICULUM FOR HIGH SCHOOLS OF COMMERCE IN THE UNITED STATES

First Year

First Half	Recitations	Second Half	Recitations
English	4	English	4
Modern Language	5	Modern Language	5
Algebra	5	Algebra	5
Bookkeeping	4	Bookkeeping	4
Greek History	3	Roman History	3
Penmanship	2	Penmanship	2
	23		23

Second Year

First Half	Recitations	Second Half	Recitations
English Literature and Composition	4	English Literature and Commercial Correspondence	4
Modern Language	5	Modern Language	5
Commerical Arithmetic	5	Commercial Geography	5
Commercial Products and Industries	5	Mediæval and Modern History	5
Bookkeeping	5	Typewriting	5
	24		24

Third Year

First Half	Recitations	Second Half	Recitations
Rhetoric and Composition	4	Plane Geometry	5
Modern Language	5	Commercial Law or Modern Language	4
Physics or Chemistry	5	Physics or Chemistry	5
United States History	5	Political Economy	5
Shorthand and Typewriting, or Bookkeeping and Office Practice	5	Shorthand and Typewriting, or Bookkeeping and Office Practice	5
	24		24

Fourth Year

First Half	Recitations	Second Half	Recitations
English Literature, Themes	5	English, Themes, Composition	5
History of Commerce	5	Civil Government	5
Select 15 periods from Modern Language, or Physics and Chemistry	5	Select 15 periods from Modern Language, or Physics and Chemistry	5
Shorthand and Typewriting, or Banking and Finance	5	Shorthand and Typewriting, or Banking and Finance	5
Plane Geometry, or Advertising and Business English	5	Office Practice, or Applied Arithmetic, or Accounting	5
	25		25

NOTE.—The number of recitations is based on the supposition that the length of a period is forty-five minutes.

CURRICULUM FOR HIGH SCHOOLS OF COMMERCE IN THE UNITED STATES

Subjects	First Year	Second Year	Third Year	Fourth Year
English Language.....	English and Composition 4 Recitations	English Composition 4 Recitations	Literature, Essays and Expression 4 Recitations	Literature and Thesis Writing 4 Recitations
Modern Language	.....	Spanish or German 4 Recitations	Spanish or German 5 Recitations	Spanish or German 5 Recitations
Mathematics.....	Algebra 5 Recitations	Plane Geometry or Commercial Arithmetic 4 Recitations	.....	Review Course 4 Recitations
Science.....	Commercial products and raw materials of commerce 4 Recitations	Commercial Geography 2 Recitations	Physics and Chemistry 5 Recitations	Industrial Chemistry 5 Recitations
History.....	Greek and Roman 4 Recitations	English and Modern 4 Recitations	History of United States 3 Recitations	History of Commerce 3 Recitations
Economics and Civics	Introductory and Local History 2 Recitations	.....	Political Economy 2 Recitations	Government and Banking and Finance 4 Recitations
Business Technique....	Bookkeeping, Penmanship, and Business Paper 6 Recitations	Bookkeeping, and Shorthand and Typewriting 7 Recitations	Office Practice, Shorthand and Typewriting 6 Recitations	Ethics of Business, Commerical Law and Shorthand (Elective)
Number Recitations....	25	25	25	25

not have the largest measure of success. The future business man should receive a training which he will regard as a means to an end. The schools should have the impress of the board of trade and the chamber of commerce if they would breathe a wholesome atmosphere. Among their instructors should be men who have had business experience, if industry and trade are to be elevated to a higher level. The trend of events is unmistakable. Society is rapidly becoming industrial and economic. We must be prepared for these changed conditions and for an economic citizenship.

DISCUSSION

C. W. Childs, Manual Training and Commercial High School, Oakland, Cal., said that he would like to add physical geography to the courses of study suggested by Colonel Murphy. Mr. Murphy replied that he provided for one year of physical geography as an elective.

A. G. Morse, teacher of mathematics, Polytechnic High School, San Francisco, Cal.—It seems to me that the gentleman who has just spoken has outlined courses for three entirely different classes of high schools. A subject like dressmaking is very appropriate in a certain kind of high school, but I do not see what relation it has to a strictly commercial high school. Business men demand first of all accountants and stenographers. They don't care whether the students have studied dressmaking or physical geography. They want persons who understand their business, so that as stenographers they can pro-

duce a correct letter with speed, and as bookkeepers can add a column of figures correctly and rapidly. If the commercial high school is not going to prepare its pupils to do these things, we shall inevitably drive those pupils into the private schools devoted to real commercial studies.

R. R. STUART, San Jose, Cal.—What is the object of a high-school commercial course? Is it to make stenographers and bookkeepers, or to educate boys and girls in a broad way for success in the business world and as citizens?

STEPHEN H. DWAN, Broadway High School of Seattle, Wash.—I agree with the gentleman as far as the point that we should first of all make our pupils good stenographers and bookkeepers; but after that point I disagree with him, for I believe we should go ahead and give our pupils all the additional cultural work that time and circumstances will permit.

COLONEL MURPHY.—I would give physical geography if it is wanted. The first object of a high-school commercial course is to give an education. Business men demand employees who are educated, who have a broad knowledge and a mind capable of thinking intelligently on a wide variety of subjects. Commercial work has been criticized because it does not promote culture. We believe that the culture work is wanted, and that it is in no way inconsistent with the most effective practical results.

Not long ago a business man told me the story of a stenographer employed by a friend of his. Said that business friend, "I have one of the most remarkable stenographers I ever heard of. The other day she wrote for me the longest sentence I ever saw. It was two and a half pages long, and it struck me that a sentence of that length could be produced only by an extraordinary young lady." The friend replied, "Assuredly a stenographer who can write two and half pages without breaking a sentence is so remarkable that I should never hope to have such a one in my office." The business man who had the remarkable stenographer went home and told her that on account of dullness in the market he would be obliged to dispense with her services; but within two hours he was looking for another stenographer.

Now, our business men want stenographers who are educated in English, and they cannot be too well educated. I want to ask if bookkeeping and shorthand alone would make a real high-school course?

L. D. INSKEEP, Manual Training and Commercial High School, Oakland, Cal.—We speak of our pupils as if they were always going to be stenographers. Are we not in reality educating them first of all to be citizens? Assuredly a high-school course should not confine itself to making office assistants, but should educate its pupils first of all to be broad-minded, intelligent, and successful citizens; and they will not be less so because their work has been so thoroly practical that they can be stenographers and bookkeepers until they rise to be something else.

MRS. L. L. HARFORD, Berkeley, Cal.—When we make a dress we do not fit the person to the dress but the dress to the person. It seems to me that we ought to fit our course to the pupil and not the pupil to the course. The simple fact that there were a great many saloons in San Francisco whose managers might demand that we fit boys and girls so that they would enter saloons, would not make us do that, and thereby sacrifice the boy or girl. Neither should we sacrifice the boy or girl in fitting him or her for a position as stenographer or bookkeeper in a business office.

The difficulty is that we dont know anything about the direction of a child's mind. A mother once said to her little daughter that she could not tell her what she ought to do because she did not know the direction of her mind. The little daughter replied, "But there weren't any directions came with my mind." It is true that we have not

received any directions with the minds of our pupils, and our hardest problem is to find out those directions and fit our courses to the life instead of trying to fit the life to our courses.

COLONEL MURPHY.—For some reason the students in commercial work in San Francisco have been falling off, while in other centers like Los Angeles there has been a great increase. San Francisco also is very low in the percentage of pupils which it holds to the end of the course, the loss in San Francisco being 20 per cent greater than in Los Angeles. I think the reason is that we don't give them what they want. In San Francisco we have a single rigid course. In Los Angeles there are forty courses from which they may choose.

A. G. MORSE.—When so many other extraneous subjects are brought into the course the English teachers have absolutely no chance to make their pupils good spellers and writers. I believe that these extraneous things must be kept out so that it is possible to do thoroly well the first and principal things demanded of us in a commercial course.

B. F. HART, Westport, Kans., High School.—Not long ago I sent out a circular letter to the business men of our community asking them some questions in regard to our graduates. All these business men said they were deficient in penmanship, business calculation, and spelling. Many also expressed the hope that we would not make our course so full of other subjects that it would not be possible to give a little time to teaching our pupils how to meet people. or how to deal with people in business or ordinary life. Some said they would like to have us try to teach initiative—that is, how to begin and do something and keep at it until it is finished. These business men said, "Don't fill the course so full that you cannot give a little time to teaching these things."

TO WHAT EXTENT ARE TEACHERS RESPONSIBLE FOR FAILURES OF STUDENTS IN THE CLASSROOM?

(1) THOMAS L. BRECHEEN, COMMERCIAL DEPARTMENT, FREMONT HIGH SCHOOL, OAKLAND, CAL.

This is not an easy question to answer. It requires considerable thought in many directions. There are so many loopholes in it, and so many phases to it, that it is hard to tell just what kind of answer is expected to be given to it. In the first place, the question is limited to the classroom. Just why this is done I do not know. Perhaps the author of this had several things in his mind when he made up this question, and he was thinking of the actual work in the classroom and the nature and quality of work students were required to do in the classroom; and perhaps he was thinking of the many students who are considered failures, in the sense of not being promoted to other and higher grades of work at the end of each promotion period. And again, he might have been thinking of the character of students that are sent out of the high schools each year into the world to battle for existence, and wondered to what extent the teacher was responsible for those students not making progress to the end that they might be of some use to society in general, and to the community in particular. Then again, he may have been thinking of the particular group of high-school students who take up the commercial course in our high schools, and who fail to grasp a sufficient knowledge of the subject to justify their being

passed on to newer fields of labor. If this is what was in the mind of the author of this question, and I presume it is, it limits the field of investigation to a narrow sphere. At any rate, I shall take it to mean that I am to confine my remarks to the classroom, and to find out so far as possible just who is to blame for students' not succeeding in the limited sphere of the classroom, and to what extent the teacher is responsible.

There are two forces working together in the classroom for a certain purpose, and to a desired end. In other words, one is the dynamic power; the other is the highway thru which this power is to pass, and in which it is expected to lodge and take root and grow and blossom into fruition in the form of useful, well-developed, successful men and women, who are to shoulder the reins of government for future generations. The dynamic force in this instance is the teacher. He is the fountain head, the inspiration, the source from which the other force rises, and by which it is enabled to go on the road to success or to failure, according to the character of the work, the goal in view, the directions given, the energy put forth, the personality invoked, and the enthusiasm turned loose.

The teacher, in most instances, is the sum total of the success of the students in the classroom. The teacher must possess several things to insure against failure on his part in the classroom. Among these may be mentioned: (*a*) a thoro preparation and training for his work; (*b*) natural adaptability to do the work; and (*c*) a personality of the magnetic type.

It is a true saying that a student will rise to the fountain head of his knowledge if rightly guided and properly directed. Very few of the students who enter high school for the first time know just what kind of work they want to fit themselves for and just what studies to take up. They are influenced in taking certain subjects thru friends or chums, and more often by their chums, who in turn are influenced by someone else's chum, when in reality they are not adapted to do that particular kind of work for which they are preparing. It is useless to try to force a student to learn something that will never be of any use to him in after life; thus students are often forced to continue studies after they have found out that they do not need to study that particular branch to fit them for the kind of position for which they are adapted, lose interest in school, and eventually fail at the end of the promotion period. The teacher should be a close observer of human nature, and of the needs of the students under his care, and fit the subject to the student and not try to fit the student to the subject. Too often this latter is the case. A thoro preparation on the part of the teacher is one of the first requisites to success in teaching, but this must be followed by a natural adaptability for teaching. Many teachers come out of the universities and normal schools thoroly prepared from a mental, moral, and physical point of view who utterly fail for lack of natural adaptation for the work. Some of them succeed, it is true, but this is on account of their youthful enthusiasm and not from any natural adaptability on their part.

We are told that only 5 per cent of the people who enter the mercantile business succeed at it. What is the matter? Is it the fault of the goods they are selling? Is it the fault of the men they buy from? Or is it the inability to cope with something for which the merchant is not adapted? Just so with the teacher. He must be not only well prepared for the work, but he must be adapted to it.

These two characteristics are not enough to insure him not to fail. He must possess a personality that will attract students to his classes and will hold them there, and will cause those students to study, and to study to a definite purpose, and to have a desire to do something. The teacher's personality must be tempered with an ambition to go higher up, and to be master of a situation. In one sense it must be of the Napoleonic type—to conquer all fear, all fallacies, to reach the topmost pinnacle of success in his chosen line of work. In another meaning his ambition must be of the type of Abraham Lincoln, an ambition to be of use to humanity in general and to his community in particular, an ambition to serve to a fixed purpose, to assist in the upbuilding of his own immediate neighborhood.

Not only must the teacher be ambitious, he must be patient. He must possess the patience of Job, that he can forbear the many weaknesses of his pupils, or the complaints of his patrons without any outward sign of smarting, or resentful revenge, or intemperate tact in dealing with them.

He must also have perseverance. He must be as persevering as Cyrus W. Field. When his students seem to be failing he must rally his strength and resources and keep his students in the right path. Because a boy or girl may be slow in grasping a subject is no cause to become impatient with them; forbearance is a virtue to be cultivated, and it is one of the guides to success in directing students on the road to a better life, a nobler citizenship, and the final accomplishment of the happiness that all are striving to attain.

Sympathy is the next requisite to success in teaching boys and girls. The teacher must show his students that he is human; that he has an interest in their well-being; in their progress; in their success in all undertakings of a high and noble desire. He must prove his sympathy by his acts. He must have that sympathy that will be inspiring to his students, and will cause them to put forth all their ability to master whatever may be set before them to do. Whatever may be the students' troubles are his troubles, and whatever may be their joys are his joys.

The teacher that is not enthusiastic about his work will never succeed. How can he arouse interest in a subject if he is not interested in it himself? How can he expect a student to do something that he would not do himself? There never was any great and lasting success that was not accomplished on a wave of enthusiasm.

Having briefly outlined the requisite qualifications of the teacher, I will next turn to the other force, the student.

As stated already, many students on entering high school for the first time are led into taking up subjects which they are by nature unfitted to pursue. They are influenced in doing so by outsiders, or by those with whom they associate. And after they have studied these subjects for a little while, they are disappointed, and want to drop out of the class. And again, many students take up the commercial studies because they think they afford an easy avenue for credits for graduation from the high school. Many students work under an erroneous idea that it is time they are to pass, instead of the complete mastery of the subject they are studying. I find that many students who have been in high school for two or three years are still laboring under the impression that all they have to do is to put in so many periods each week in the particular subject for a term, and then they will be entitled to so many credits toward graduation. The average high-school pupil seems to think of but two things, viz., time and credit toward graduation. Now whose fault is this? Are the students to blame? I think not. They have not been instructed differently, and the custom has grown up, and is still growing; each class coming into the high school inherits this same impression, and it continues to grow from year to year. What the teachers should do, is to begin right now, and instill into the students a desire to be something, to prepare for a definite career, and cleanse their minds of that false idea that time and credits are the ultimate goals to be reached in their high-school life.

The environment of the student determines to a great extent his progress in school. The student may have inherited a lazy and indifferent disposition, and by his associates cultivated this to such an extent that all of the ambition, patience, perseverance, sympathy, and enthusiasm of the best teacher in the country would be a failure with such students. The student may be of a temperament that requires tact and skillful effort in directing into right channels, in which case the teacher must ever be alert to his duty to guide the student properly along lines of least resistance, and in highways of most usefulness.

A student may be ambitious and have tendencies that hinder his progress under the most skillful guidance of his teacher. These must be overcome, and the avenues of success pointed out to the boy or the girl, that they may keep in view one object and only one, viz., the complete mastery of the subjects they are studying, to the end that they will be tools in the students' hands for wielding power and conquering difficulties in the battles for existence.

The teacher who possesses a thoro training for his chosen line of work, and is adapted for it, and has a personality that will grasp his students and hold them, and has the relative amount of ambition, patience, perseverence, sympathy, and enthusiasm, and uses his best efforts in his work will not be responsible for failures of the students in the classroom. In proportion as he falls short of this will his responsibility be.

(II) C. A. BERNHARD, COMMERCIAL DEPARTMENT, UKIAH HIGH SCHOOL, UKIAH, CAL.

After reading the subject assigned I cannot see that it calls for a brief either for or against my fellow-teachers. Rather it should be a discussion of responsibility: For what are we responsible and for what not? For instance, the opportunity is here to give ourselves a most excellent "roast" for all our classroom failures. On the other hand, the opportunity is equally good to blame the other fellow.

There are some things for which we teachers are largely responsible. For the first one we will mark preparation.

Do we prepare as we should? I think not. Why? Well, there are a number of reasons. One is the unstability of the occupation—or profession, as many of us like to call it; occupation is the better word. Unstable you say. You point me to the great army of teachers here and remind me that there is none other like it and point to the fact that for a hundred years we have been rolling down the corridors of time, making history as we go and making ourselves one of the strongest factors in the development of this great nation. Unstable! And I answer, "Of course we are."

Did I hear some Missourian over there say "Show me"? Well, here you are. It is indeed a great army of teachers we have in the United States, but it is about as changing as the sands of the sea. Look at the great majority of women it contains. Now why does any woman teach school? That question we dare not answer, but I am going to lay you down this proposition as bearing on the subject. If the right man should come along in each case and ask the right question, backed up by the right amount of security, nearly every lady teacher would answer in the affirmative and enter upon her real "profession"—that of home-builder. As it is, a large percentage of our lady teachers will have married before we meet again.

And how about the men? I have never known a man who honestly and truly started out to be a school teacher for life. For a hundred years we have been making it a stepping-stone for law, medicine, politics, or business. The young man "graduates" and must have some quick money. He knows he can get a certificate, and a school job will support him and give him some spare time until he can find something better. Some of us soon fall into the salary rut, others teach on because they are unfitted for anything else, and while they hate the work they cannot give up one hundred dollars per month for the uncertainty of business. Pretty soon they are too old and too proud to begin business at the beginning and unfit to begin anywhere else. They are chained to the teacher's desk. The chains gall them and they chafe and fret, yet they cannot move. We see them, down to old age, unsatisfied and half-failures.

Not long ago a school superintendent complained to me that all his

first-class lady teachers get married as soon as they really learn to do good work. I said "How about the men?" "Oh, they are promoted to principalships." "Then what?" And after a moment's thought he replied, "Well, I see what you mean. All our best men soon go into something else. We seem to be doomed as superintendents to carry on our work with young stock, unbroken, mixed in with the old, discouraged half-failures, and sometimes the friction is terrific, consuming nearly as much energy as goes into the real work."

Because of this unstability we do not take the trouble to prepare as we should. In fact it is not even a question of preparedness. It is a question of getting a certificate and a school. With the great majority the preparation ceases as soon as they can secure a certificate.

With law it is not thus. A lawyer begins to practice and keeps right on studying as long as he practices. He must—or be crowded out by his more progressive fellows. In medicine and in business a man's success depends upon the degree of his preparedness. In teaching his success depends upon his certificate and how politic he is. His preparation has ceased and his surplus energies are directed toward a future occupation or profession.

Of course temperament and good-nature are important factors for success. These two terms may be condensed into that one word "tact." If a teacher has tact he can surmount great difficulties with ease.

I maintain that the teacher who has a certificate and is endowed with a reasonable amount of tact can go right on indefinitely without any further preparation. This is not true in the outside business and professional world. There men must make good. The teacher's product is not judged until long after. In the business world our work is judged every day.

Now I am supposed to be discussing our responsibility for classroom failures. It may look as tho I am a long way off the track, but really I think not. If we were properly prepared for our work and used the best effort we knew, we would have no responsibility for the failures. I maintain that we are not properly prepared and that there does rest upon us a heavy responsibility.

We commercial teachers are preparing men and women for earning a livelihood in the great commercial world. We have in our classes the future great accountants, general managers of vast corporations, expert reporters—both court and verbatim. We are supposed to be teaching these things to them. Dare I ask you, Have you ever done the thing you are trying to teach these boys and girls to do? Could you expert the books of your home county? Could you formulate and install an up-to-date set of books for a department store such as is found in our cities of five thousand to ten thousand population? Do you understand department accounting? Could you show your class just how cost accounting

is conducted in an ordinary manufacturing plant? Can you readily draw up in correct form all the legal documents discussed in your commercial-law class? You are better than the average if you can. Or can you go into the courtroom and properly report the next murder trial in your home county? Suppose one of the great city papers had said to you, "We will give you one hundred dollars if you will send us in a complete transcript of everything said and done at this meeting today"; could you get that one hundred dollars? If we can all answer these queries and some more of the same nature in the affirmative, I will take back my statement about unpreparedness.

The plain fact is that many of us are trying to teach boys and girls to do something that we cannot ourselves do. In our bookkeeping classes we use about twice as much time as we should on the work we accomplish. We have some textbooks with high-sounding titles and we teach these thru, and call the product "bookkeepers." In shorthand we have a great variety of systems and we teach the book thru, doing about so much scolding about poor lessons, but when the end of the term comes, certain ones are passed on and called stenographers. Are they?

I give it to you as the opinion of one, that no person can properly teach a thing he cannot himself do. I once knew a great piano teacher who had but one arm. He had, however, learned to play the piano before he lost his arm. It takes more than ability to write to make a reporter. Before a teacher is qualified to teach shorthand to a pupil for any purpose he should be a master of the science—a real reporter. Before a teacher is qualified to teach bookkeeping he should be a tried and proven bookkeeper, for by that means only will he know how it is done in the rush and hurry of the business world. Commercial law should be taught by a good lawyer.

We teachers are not responsible for this state of the profession. It is the result of our form of civilization. We are, however, responsible to our pupils for undertaking to teach what we cannot properly teach. We are also responsible if we allow this condition to remain.

I believe that we get in this world about what we pay for. The communities in which we live have set their price for teaching. They have then proceeded to certify teachers. If the examinations are too rigid those of proper training will not apply because the business world offers more money for their services. The examinations have year by year been set low enough to get teachers enough to go around. When teachers get plenty the examinations are made more difficult. When teachers are scarce they are made easier, and you know that is the fact.

The price should be set for this work just a little higher than the business world can afford to pay. The very cream of men and women in this land should be in our schoolrooms. There is a great moral question involved. We are dealing with the lives of men and women of the future.

They should be handled by experts whose services are paid for at the highest market price as established by the market where such services are consumed.

Of course we teachers are not responsible for the "poor material" which comes to our rooms. The Great Book tells us that their sins shall be visited upon them even unto the seventh generation, in speaking of parents.

In all our classes there are those bright boys who hardly need a teacher, but the most of them are not thus: many in fact are very hard to manage, let alone instruct, but these are the sins of their grandparents away back. About one hundred years after all the parents learn how to rear the model child our problems with this kind of pupil will be solved. In the meantime we must give him the best there is and allow the responsibility to remain with the grandparents.

In conclusion, then, I feel that we owe a great moral responsibility to the children in our classes for the kind of instruction placed before them each day. We owe them kind and courteous treatment and a world of patience, but we do not owe any responsibility for the result. That is away back over and beyond our sphere. We know not the physical and mental handicaps these children may be suffering from. If we are morally blameless we will see that the instruction they get is the very best and most up-to-date, and then trust to the great God of the universe for the result.

And how shall this be brought about? Briefly: Our salaries must be doubled and trebled, and even quadrupled in many cases. Next we must earn those high salaries—actually earn them. More men must be brought from the business world and put into our schools. Our whole American system of taxation is wrong and must be changed until it is right. We teachers must study it and help to right it. I think our first plain duty is a strong organization and demand for much higher salaries and in the meantime a strenuous effort for better textbooks, better equipment, and a much greater knowledge of the work we are trying to do.

Lastly, we must write the word co-operation on our hearts so that it can never be effaced. We must study its meaning until we can co-operate in the fullest sense of the word. The great majority of women now working on salaries should be mistresses of happy homes and if men were trained and then paid as they should be this could be brought about. There never was a time when teachers needed to know so much or be so wise as at the present. In conclusion I give you three words for thought: organization, co-operation, and preparation. When these are mastered we will not need to worry over classroom failures, for they will not exist.

THE ESSENTIALS OF THE IDEAL COMMERCIAL TEACHER

P. M. FISHER, PRINCIPAL, MANUAL TRAINING AND COMMERCIAL HIGH SCHOOL, OAKLAND, CAL.

In considering the character of the teacher it is well first to review briefly the commercial course offered in the public schools; for I shall confine my remarks to public education, diverging only for purposes of illustration. I shall therefore briefly consider: (1) the growth and present status of commercial education and its probable future; (2) the present provision for the preparation of commercial teachers (*a*) in subject-matter, (*b*) in method; (3) The qualifications desirable and essential in the teacher (*a*) because of subject-matter to be treated, (*b*) because of association with other members of the school faculty teaching other courses, (*c*) because of the condition and needs of the students, (*d*) because of the field for which the student is preparing.

I have followed very carefully the reports and addresses and discussions in the general and in the department meetings of this session of the National Education Association. There are two dominant notes: (1) the physical welfare of the child; (2) the pupil's preparation for social, civic, and business service. About the importance of the first there can be no great difference of opinion. Under the second, we have the reason and justification for commercial education.

The American state presents a case of monopoly in education. The state of California provides for and practically guarantees that every child in the state shall be offered at public expense an education. Somewhat similar provision is made in the other states of the Union. The state does this from a high order of selfish motive; namely, to the end that the state may be perpetuated. A government founded on the will of the people must provide that this will shall be intelligently expressed and administered, in order that the ends of the community may be subserved by the state. The growth of that phase of education denominated industrial, or business, is phenomenal. It cannot be an accident. It must arise from the nature of things, in a country where government and institutions respond to popular needs when pressed. The statements that I make of California are therefore measurably applicable to the situation in other states.

In 1891 there were in California about 24 high schools, in none of which did the commercial course figure. In 1911 there are 212 high schools, in 172 of which there are commercial courses with nearly 400 teachers employed in teaching the same, out of an entire high-school force of about 1,900. Stanford University in its wide field of electives has for years recognized and accredited attainment in the mechanic arts and in business. Within the last two years the more conservative University of California has declared for the acceptance in matriculation of attainment in these

same lines. In very recent years there was a discrimination in the California high schools between teachers of commercial subjects and teachers of the traditional academic subjects in the matter of salary. The movement now is in the direction of equal pay in all subjects taught in the high schools. This is as it should be. Nothing is more embarrassing or humiliating in a high-school faculty than a salary discrimination based on the supposed relative value of subjects taught. For years in California, under our State University system of high-school accrediting, the teachers of mechanic arts and commercial subjects were humiliated by the fact that their work was not considered in the matter of accrediting. This unwholesome condition has been changed, and so far as the subjects of the curriculum are concerned all members of the high-school faculty are on an equal footing. In providing instruction in commercial subjects the attitude of school boards, principals, and teachers should not only be one of friendliness, but there should be a manly, unapologetic declaration that every subject worthy to be put in a high-school course and well taught is of equal rank. There should not only be no humiliation of teachers but there should also be no humiliation of students.

Again, we should find ourselves thinking of the years of a high-school and college course as going in couples rather than in fours. No more significant thing appears in recent high-school administration than the action of the Chicago Board of Education, under the superintendency of Mrs. Ella Flagg Young, in the provision for various two-year courses in the high schools of Chicago. There are plain economic conditions which justify this. Educators lament the small percentage of public-school pupils who enter the high school. A very considerable percentage of grammar-school students could be induced to take a definite and practical two-year course in a high school, who could not for a moment consider a proposition of a four-year course—and they and the state would be gainers. We must not lose sight of the fact that the period during which young people, for economic and psychological reasons, have long been accustomed to prepare themselves for a trade or for business, is the period between fourteen and eighteen years of age. To meet this condition the high schools should give lines of work, pursuing which the student will feel that he is being prepared for some vocation. We must not be too sensitive about the terms "vocation" and "vocational education." The time has come when our public schools should begin to make payments on a long-deferred obligation to the industrial classes of the country. We should emerge from the dusk and twilight of the old notions of education into the sunlight of the modern interpretation of the duty of the public schools; namely, to prepare young people for definite service to themselves, the community, and the state.

The subjects to be treated in the commercial courses of high schools

are naturally still a matter for discussion as to scope and quantity; as to quality the teacher should see to it, and boards of education should insist upon it, that it be of a high order. It has been the experience of the past, and may still obtain in cases, that the commercial teacher has less scholastic training than his associates in the faculty. This has happened because there have been no special schools for the liberal education of such teachers either in subject-matter or in method. Teachers are apt to make comparison among their fellows based upon the time spent in preparation, and the character of preparation received. There must be provision for this training of a high order. The two universities in California are about ready to give it now. Meanwhile, it should be the determination of every commercial teacher to give instruction in his classes of such high quality that there could be no odious comparison.

Now as to the ideal teacher. It may be accepted as a matter of course that the commercial teacher should understand his subject. Knowledge is such a unit that no man can be greatly proficient in his specialty unless he is at least well informed in some other lines. Therefore it follows that the more general his equipment may be, the better he will teach his own specialty. The great advantage of the commercial teacher is that his subjects are intensely alive, that they are applied constantly before him and his classes in the community. Every principal of a commercial school and every man teaching in it should be a member of his local board of trade or chamber of commerce. Every woman teacher should be a member of at least one club, organization, or society which deals with subjects pertaining to the welfare of the community. The principal usually sounds the keynote of the school. It is he who is planning for it as a working organism in the community. It is he who should give it direction and purpose. But every member of the faculty, in addition to teaching his own subject, should seek to catch the spirit of the school as a whole, so as to contribute at as many points as possible to its usefulness.

I would like to commend to all commercial teachers the sentiment uttered at this session of the Association by Miss Julia E. Crane, of Potsdam, N.Y., when she said: "Great teachers are those whose love of youth makes them open-minded to the viewpoint of their pupils."

Commercial education need not unduly emphasize the dollar. There is no better field for the display and exercise of principles of rectitude and high honor than the field of business. Let me commend to the teacher who finds herself decrying business, business methods, and business training, that charming character, Betty Vanderpoel, in that wonderful story of English and American life, *The Shuttle*. No woman reading that book should ever again fail to pay proper tribute to business instinct, methods, and practice.

To close: Commercial instruction in our secondary schools has come

to stay. It is growing to be more and more an expression of community needs. It remains for those to whom this great work of the state is committed, namely, the school officers and teachers, to recognize this situation, to treat it with proper respect, and to seek so to administer it that these schools and this line of education shall to the utmost and highest serve the community and the state.

DEPARTMENT OF CHILD HYGIENE

SECRETARY'S MINUTES

OFFICERS

President—Will Grant Chambers, University of Pittsburgh ..... Pittsburgh, Pa.
Vice-President—Lewis M. Terman, Leland Stanford Jr. University.... Stanford University, Cal.
Secretary—Percy E. Davidson, Leland Stanford Jr. University..... Stanford University, Cal.

FIRST SESSION—Tuesday Forenoon, July 11, 1911

The meeting of the Department of Child Study was called to order at 9:30 A.M. by the vice-president, Lewis M. Terman, Leland Stanford Junior University, Stanford University, Cal.

The subject of the first paper was, "Two Thousand Children Tested by the Binet Measuring Scale for Intelligence," by Henry H. Goddard, director of psychological laboratory, New Jersey Institute for Feeble-Minded, Vineland, N.J.

This was followed by a paper on "Results and Impressions of a Preliminary Study of Pedagogical Retardation," by Percy E. Davidson, associate professor of education, Leland Stanford Junior University, Stanford University, Cal.

The third paper of this session was on "Health and Ventilation" by Leonard P. Ayres, associate director of Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.

The chairman appointed the following Committee on Nominations:

Leonard P. Ayres, associate director, Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.
Frank G. Bruner, Department of Child Study, public schools, Chicago, Ill.
Everett Shepardson, head of practice school, State Normal School, Los Angeles, Cal.

SECOND SESSION, ROUND TABLE—Tuesday Afternoon, July 11, 1911

The department met in Round Table Conference for the discussion of the topic, "The Qualifications and Training of the School Health Officer." The following took part in that discussion: N. C. Bullock, M.D., director of medical inspection, public schools, San Jose, Cal.; N. K. Foster, M.D., director of Department of Health and Development, Oakland, Cal,; Leonard P. Ayres, associate director of Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.; William F. Snow, M.D., secretary of State Board of Health, Sacramento, Cal.; and Lewis M. Terman, Department of Education, Leland Stanford Junior University, Stanford University, Cal.

THIRD SESSION—Thursday Forenoon, July 13, 1911

The meeting was called to order at 9:30 A.M. by the vice-president.

A paper on "Effects of Low Temperature and Open-Air Classrooms upon Mental Alertness of Pupils" was read by Frank G. Bruner, assistant director of Department of Child Study, public schools, Chicago, Ill.

Leonard P. Ayres, associate director, Department of Child Hygiene, Russell Sage Foundation, New York, N.Y., then presented a paper on "Open-Air Schools."

The last topic on the program, "The Field for Clinical Child Psychology in the Public Schools," was discussed by Lewis M. Terman, Department of Education, Leland Stan-

ford Junior University, Stanford University, Cal.; Leonard P. Ayres, associate director, Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.; and Mrs. Vinnie C. Hicks, special psychologist, public schools, Oakland, Cal.

The following resolution was presented by B. S. Gowan, superintendent of schools, National City, Cal.:

WHEREAS, The science of school and child hygiene has in recent years undergone revolutionary advances; and

WHEREAS, Thoro investigation of the teaching of this subject in the normal schools of the United States reveals the fact that they have almost universally failed to keep pace with this progress; therefore be it

Resolved, That the Department of Child Study of the National Education Association formally memorialize the normal schools thruout the country to extend and modernize their teaching of the subject of child hygiene and related topics.

The resolution was seconded and carried unanimously.

The following resolution was then offered by Dr. Leonard P. Ayres:

WHEREAS, In the opinion of the membership of the Department of Child Study of the National Education Association, the work and interests of this department have outgrown the scope and intent of the term "child study" and have become centered upon problems for the mental and physical hygiene of children; be it

Resolved, That we hereby respectfully petition the Association thru its Board of Directors to change the name of this department from the "Department of Child Study" to the "Department of Child Hygiene."

This resolution was put as a motion, was seconded by Frank G. Bruner, and carried unanimously. About two hundred active members were present.

The Committee on Nominations gave the following report:

For *President*—W. H. BURNHAM, professor of pedagogy, Clark University, Worcester, Mass.

For *Vice-President*—WILLIAM C. BAGLEY, professor of education, University of Illinois, Urbana, Ill.

For *Secretary*—MISS THEDA GILDEMEISTER, supervisor of training, State Normal School, Winona, Minn.

The report of the committee was unanimously adopted.

The department was then adjourned.

PERCY E. DAVIDSON, *Secretary*

PAPERS AND DISCUSSIONS

TWO THOUSAND CHILDREN TESTED BY THE BINET MEASURING SCALE FOR INTELLIGENCE

HENRY H. GODDARD, DIRECTOR OF DEPARTMENT OF RESEARCH, TRAINING SCHOOL FOR FEEBLE-MINDED, VINELAND, N.J.

In April of this year the New Jersey legislature passed a law which among other things says that the Commissioner of Education of the state shall, with the advice and consent of the State Board of Examination, prescribe the Binet or such other methods as to him may seem best for ascertaining what children are three years or more below the normal.[1]

This gives the Binet Scale of Intelligence official recognition in the state of New Jersey. It has already attracted considerable attention in other parts

[1] Since the above was written it appears that at the last moment the word "Binet" was stricken out of the law. But since there is no other method by which we can discover "what children are three years below normal," the Binet scale is recognized in reality, tho not named.

of the country and it is very desirable to have some statement of results from its use.

It is with this thought that we at this time present the results of testing an entire school system by this method.

The purpose of this paper is twofold: first, to show that the Binet scale is a method of marvelous accuracy and great practical value; and second, to show how it can be applied to help us solve some of our problems and help make the school system more efficient.

Now that we are beginning to recognize that many of our difficulties in school are the result of differences in inborn capacity rather than in inborn wickedness, it is necessary that we have some method of measuring that capacity, so that we may know in each case where we stand. Recognizing this, we undertook at the beginning of the last school year to apply these tests to an entire public-school system, consisting of about two thousand children. The methods and details of this work, together with the gross results, have been published in the *Training School Magazine*, and the more careful analysis of the results in the *Pedagogical Seminary* for June of this year. This we shall not repeat at this time, but shall give only such facts and figures as are essential to our present purpose.

The gross results of the tests in the first six grades are shown in the following curve. The figures on this curve mean this: that of 1,547 children tested, 554 tested exactly at age—that is to say, they answered correctly the questions that had been set for their respective ages. Three hundred and twenty-nine (329) tested one year above the average and 312 tested one year below—that is, they could do the questions for a year older or a year younger, respectively, than their age. Again, 49 were two years above the average, 14 were three years above the average, and 2 were four years above; while 156 were two years below, 79 three years below, 37 four years below, 8 five years, 6 six years, and one 7 years below, making a total of 1,547 in these six grades who were tested.

It will be noticed that this is practically a normal distribution, and therefore this curve is practically a mathematical demonstration of the wonderful accuracy of the Binet scale. We may digress here to point out the significance of the results thus obtained, because they demonstrate the value of the Binet method.

For practical purposes it will be entirely satisfactory to consider those a year above and those a year below as forming a group with those who are just "at age" and consider all of these as satisfactory pupils. These constitute 78 per cent. Above this group we have those who are two, three, and four years ahead of the average. These are the children that are especially well endowed. And one may pause here for just a moment to ask whether we should not in our school systems recognize these children and give them every opportunity to profit by and make use of the gifts that they have by nature. We shall know what is actually done with these children in a later part of the paper.

Below the average group we find two groups. First, there are those that are two years and those that are three years behind the average. These constitute a group of children whom we call "merely backward," that is to say, they are backward but they may catch up with the group, or at least they may learn the things usually taught in the elementary grades and may go thru school learning enough so that they may become useful and respectable citizens in the community. They may always be a little slow but they will be useful citizens. They ought not to be asked to do the regular work in the regular time. They are slow and dull and heavy and should be put in special classes, where there will be only about ten or twelve of them. They should be given a teacher who understands the

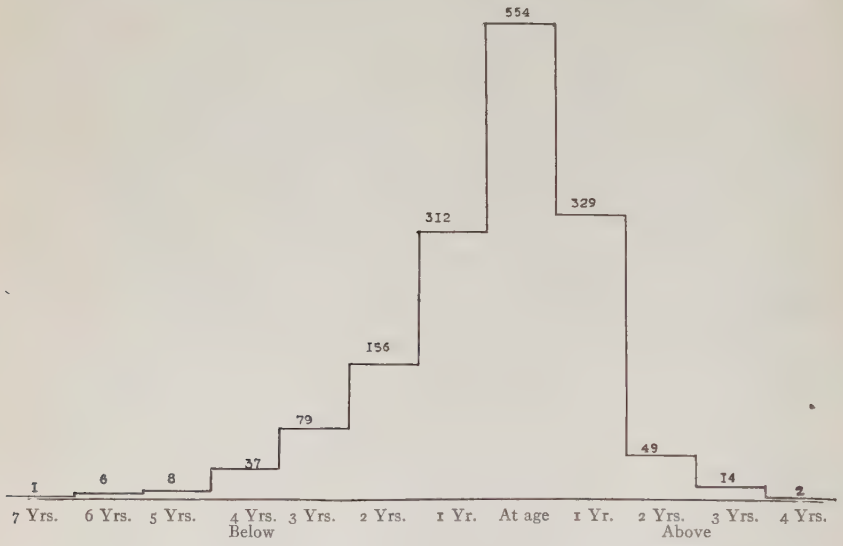


FIG. 1.—Showing distribution of public-school children on mental development as shown by the Binet-Simon measuring scale for intelligence.

problem and can help them along and enable them to learn what they can never learn without more help than they can possibly get in a class of thirty or forty.

Below this group, again, we have those children that are four years and more below the average child. Experience is conclusive on this point that such children are so far behind that they can never catch up with the average. With these there is a fundamental and serious reason why they are so backward, and that is that for some cause or other their brain has never developed and never will develop, and they can never learn those things that are necessary and they can never have the judgment and common-sense that is needed in order to live a normal life in any modern community. These children ought by rights to be segregated, not only for the sake of the normal children but for the sake of the future of society. They should

be placed in large colonies, well managed and fully adapted to make them as happy and as useful as their limited capacity will allow. Such a thing is entirely feasible, and if we would only take hold of the question we could solve in a generation three-fifths of the problem of feeble-mindedness. But, at least until we can get the machinery going, we must take care of these children in the public schools. But we now know that 65 per cent of these children have inherited the condition and that if they grow up and marry they will transmit the same condition to their offspring. Indeed, we know that this class of people is today increasing at an enormous rate in every community and unless we do something to stop this great stream of bad protoplasm, we shall some day be swamped in a sea of degeneracy.

I have reported elsewhere (*Pedagogical Seminary*, September, 1910) the result of testing four hundred feeble-minded children with the same tests and the remarkable agreement of that result with the institution experience.

They have since been used by Huey at Lincoln, Ill., and reported in the *Volta Review*, and by Wallin on *Epileptics*. They have been used on several smaller groups of school children, notably by Miss Johnson in England.

In all of these cases I believe the method has justified itself, the users having made no suggestion that the method is not valuable, but only that it might be improved. We have suggested some changes which will, we believe, improve it in some of its details.

It should perhaps be stated here that the great success of the tests lies in the fact that they are based not on training or conscious learning on the part of the child, but on fundamental processes which develop at different ages. This is well illustrated by the square and diamond tests. Binet finds (and we have abundantly confirmed it) that a child can copy a square at five years of age but he cannot copy a diamond until he is seven. This seems to be due to the fact that certain eye-muscle (and perhaps finger-muscle) co-ordinations necessary to the drawing of oblique lines do not develop until seven years of age.

In a similar manner the tests for the other ages are largely dependent upon processes that develop at the respective ages.

In other words, we may say that any child who has lived in the world in any reasonable environment may be expected to have acquired the power to answer these questions without having been consciously taught. The result of the use of the tests proves that this assumption is surprisingly correct.

Let us now turn to our second point and see of what practical use the tests can be to schoolmen.

Space does not permit me to reproduce here the tables—they will be found in the *Pedagogical Seminary*, June, 1911; but some illustrations will show the argument.

We have taken those children who are one year behind grade, two

years behind grade, etc., in the school and then, by getting their mental age as determined by the Binet-Simon tests, we have determined whether the two agree; whether, for example, according to the Binet scale, they have mentality enough to be up to grade and are kept back for some reason that really ought not to apply; or, on the other hand, are they farther back than they ought to be; or, again, are they in their right place? And the same with those who are ahead of grade.

In another count we have taken those who are at age, one year behind (according to the Binet scale), two years behind, etc., and have found out where they are in their school grades.

We found 20 children of the mental age of eight in the first school year. It might be thought that these had just entered school and consequently were properly placed. But looking up their physical age, we find 13 of them are eight physically as well as mentally. One is ten years old physically, eight years old mentally, and still in the first year. These 14 children are certainly old enough to be in a higher grade. Of the other 6, 3 are physically seven years old, 1 is six years old, and 2 are only five years old.

Again, at ten years of age mentally, we find that there are 17 children in the third year of school. Let us see how these children are distributed. We find 4 of them who are ten years old physically as well as mentally. These children should, of course, be in the fifth year of school, and there seems to be no reason why they should not be there. Three more are eleven years old physically. These 3 are really one year backward but are held back *two* years, possibly thru some technicality, or because they are especially weak in some one branch. Seven more are nine years old physically; in other words, they are one year in advance of their age. Another is only eight years of age and 2 more are only seven. It is probable that these children are kept back to fit into the grade that corresponds most nearly to their age, even tho their mental ability would warrant their being two years ahead.

Once again, we find at the mental age of nine there are 17 children in the fifth school year. Three are nine years old physically also. They have been put ahead a year, perhaps because of good memory or because of some precocious ways, altho they are not anything above the normal mentality and should be in the fourth year of school. Six others are ten years old physically, thus showing that they are one year backward and that they have been pushed ahead undoubtedly in an effort to keep them up to the grade which their physical age requires. Five more of this group are eleven years old physically. They, again, have been pushed forward a year, altho it has not been possible to push them forward two years, as their physical age would demand. Three more are only eight years old physically (altho mentally nine). Here you have the precocious child. He is a year ahead of the average child and consequently is pushed along by his ambitious par-

ents or his ambitious teacher, so that altho he has not the mentality to be in the fifth grade, yet he is found there. This is the child that later breaks down and gives rise to the belief that the precocious child is destined to failure later on. He is destined to failure if his precocity is made the basis for his being crowded way beyond what his actual mental endowments will warrant.

Let us now analyze the situation from the standpoint of the physical age. We find that at age ten, there are 14 children in the second school year. Two of these are ten years old mentally as well as physically. They have the right to be in the fifth school year and yet they are held back to the second. Five more are of the mental age of eight. They have the ability to be in the third school year but are held back in the second. They are dull and slow, as is shown by the fact that while they are ten years old they test only eight, and consequently they are not only held back to what their mental age would warrant but a year beyond that. The remaining 7 are seven years old mentally, and consequently are in their right place. One-half of the total number are thus found to be where they ought to be; the rest are unjustly treated.

This is the type of child that makes the truant and incorrigible. He takes no interest in the work because it is below him, and consequently he plays truant or gets into mischief.

As a final illustration, at age nine we find there are four children in the sixth school year, two years ahead of what their physical age would warrant. Three of these are ten years old mentally. In other words, they are one year precocious but they are placed two years ahead. They are thus a year ahead of what even their mental ability would warrant. This is perhaps a case of a bright, attractive child who is pushed along because he is above the average. And because he is above the average he is pushed along at twice the rate at which he ought to be. Another case where later the child must break down and become useless.

We find the fourth one is two years ahead of his physical age and is consequently placed where he should be according to his mental ability. In other words, out of four children, one is correctly placed.

Now all this is precisely what we all know does happen in our schools. We know that children are held back because they are too bright; we know that they are pushed forward because they are too large for their grade; we know that they are held back because of some technicality—they are not up in their arithmetic, or they cannot read quite well enough, while in other things they are abundantly able to go ahead. Besides that, we know that this is true from the experience of these children in after life.

Without going farther into the details of this which has been fully described elsewhere (*Pedagogical Seminary*, June, 1911), the general result is this: We find there are two tendencies in each case. First, there is a tendency to keep all children close to the average. Now, if a child is a little

backward or a little precocious, the tendency is to keep the one up to the average that is ahead of his ability, and bring the other down to the average that is below his mental ability. The evils of this in either case are of course manifest. The child who is of too slow mentality to keep up with the class is dragged along faster than he can follow, does not understand the work, and becomes more and more stultified, while the child that is ahead of grade is able to do his work in less time than is required for the others and then he either falls into mischievous habits which may possibly become vicious, or he becomes lazy, which is perhaps little less serious from the standpoint of individual and race efficiency. Secondly, if the child is too far backward to be kept up to grade, he is apparently given up as hopeless and is not helped to do even that which he might do, and we find them very often in grades much farther back than their mentality would justify. This means that they get discouraged. Such a child is generally conscious that he is not equal to the average of the class, but on the other hand he knows he is not as poor as those with whom he is placed; he knows that he understands the work that they are doing and it degrades him. It hurts what little pride and self-respect he has to find himself in the class with children so much younger and smaller than he, and to hear himself continually asked questions that are so easy as to be silly. The result is that he often becomes stubborn and obstinate and does not even answer the questions that he might. Sometimes these children have gotten back where they are thru some technicality. Consequently they have not been promoted, when in reality, general intelligence would put them a year, or even two, and sometimes three years ahead of where they are found.

In the case of the precocious child there is a tendency to send many of them ahead farther than they can go, while the tendency is acting on the one hand, as already stated, to keep them with the average. There are apparently quite a few children who either because of their bright, sprightly ways, their industry, or the ambition of their parents, are pushed ahead and their year of precocity, so to speak, is credited as two, and we find them instead of a year ahead of grade, where perhaps their mental endowment would permit, two years ahead, or even three years ahead; that is, a year or two years farther ahead than they have any right to be.

All of this demonstrates very clearly that we need some method of grading these children more carefully than we have been able to do by our ordinary school methods. Many will say at once, "But what right have we to assume that this new Binet scale is more valid as a method of determining where a child ought to be than the experience of thousands of teachers in schools and our beautiful system of promotion?" In reply to that I can only say that so far as our present system is concerned I believe that every schoolman has more or less misgivings as to the accuracy of our ordinary judgment of a child, that very few people have great confidence in our methods of promoting as doing actual justice to the child. And if anyone

does have an overamount of confidence in our procedure in the past, it is only necessary to compare the estimates that are placed upon children in school with their after-experience in life and see how often the two are radically in disagreement for him to have his faith in the old régime very seriously shaken. The poorest man in high school or college is often the greatest success in life.

For the Binet tests I can only repeat what has already been said and add a little more in the same line. The distribution curve is an unanswerable argument. We have now been using the tests for nearly two years and with ever-growing confidence. They have stood every test. We have had confirmation in many ways that we never expected and the result is that we have come to feel, much against our first prejudices, that the Binet scale is a marvel of accuracy. The figures obtained in this particular study have been worked over in a great many different ways, and at every turn they confirm the feeling that they are based upon a very accurate estimate of the child. Take this very matter that we have just been discussing. Every schoolman and every parent knows that this is exactly what does happen, that many children are kept up to the average who ought not to be, while many others are held back; that every one of the conclusions that we have drawn from this paper is known to be true; the only point is that we are not always sure of the particular individual. Now, the Binet scale will tell us to a nicety just where a child stands in his mental capacity, and consequently, just where he ought to be placed in his work.

At the Training School at Vineland every child that enters is now examined and his mental age determined and he is afterward treated in accordance with his mental age. He is placed in the classes or at the work that his mental age justifies. He is periodically retested and his condition noted in order that his treatment may be adapted to any change or progress that he makes.

The same thing could be done in every public school with tremedous satisfaction to all persons concerned. Suppose when the child enters the primary grade he is carefully examined by the Binet scale and his mental capacity determined. Then the teacher knows what to do with him and what to expect of him. He then may be examined from time to time by the same scale and his progress noted. If he is found to be feeble-minded, that fact should be noted, and if he cannot be sent to a colony or school for such persons where he will be happy and reasonably useful, then he should, as before said, be placed in a special class and be given the best possible treatment in the public school.

I believe that such a procedure, carried out, would largely solve our problem of truancy and incorrigibility, because these truants and incorrigibles are largely the results of a misunderstanding of the mental capacity of the children. On the one hand we try to hold the dull child up to average and thereby utterly discourage him, and on the other hand, we let the pre-

cocious child dawdle along with the average child, wasting his time and getting into unhealthy habits, becoming lazy, or else devoting his time to mischievous or malicious practices.

From the study of the answers given by children of different ages to the various questions, we have concluded that while the scale as a whole is entirely satisfactory, yet there are some questions that are a little too easy for the age in which they are placed and others that are a little too hard, and that the scale would be somewhat improved if these were changed about a little. We find that Professor Binet himself in a recent issue of the scale proposed some changes. We do not find that our results agree entirely with those changes, probably due to the differences in the nationality, but we have published a revised scale and we now propose to use it, adopting as many of Binet's later suggestions as our experience warrants and changing other questions in accordance with the results of this study.

In conclusion, let me say that if anyone doubts the value of this method of determining the intelligence of children, let him try it. He will certainly come to the conclusion that we have in this system an enormous aid in our school work. We owe many things to France and the Frenchman, but I predict that we shall find in the future that we owe them for nothing that is of more value to us than this scale, which will enable us to understand children better than we have understood them before and to treat them more wisely.

RESULTS AND IMPRESSIONS OF A PRELIMINARY STUDY OF PEDAGOGICAL RETARDATION

PERCY E. DAVIDSON, ASSOCIATE PROFESSOR OF EDUCATION, LELAND STANFORD JUNIOR UNIVERSITY, STANFORD UNIVERSITY, CAL.

What is reported in this paper is an experience rather than an experiment, a reconnoitering sally rather than a determined attack. It reflects in part the new interest in individual children so well illustrated in the work of Dr. Witmer at the University of Pennsylvania, but quite as much a growing conviction that educational work in universities stands greatly in need of a closer contact with, and a sounder basis in, the actual subject-matter with which it presumes to deal; that is, individual growing minds, maturing under the conditions of the average American public school. The boys who served as subjects in the study were not of the mentally defective group. They seem to represent a status below normal as the school population goes, but of the rapidly and less rapidly recoverable sort, far above that of the apparently imbecile and wayward children of the recently reported studies. This group has not had the consideration it deserves. Its significance is great not only as a very large element in the school population in need of special attention, but particularly because it seems to represent a very likely field for the study of current pedagogy, not in the abstract as right or wrong from principle, but at the much more striking

point at which it breaks down and fails to yield the ordinary results. Time will permit the description of three[1] cases only. These descriptions are based upon an acquaintance of three months while the boys were members of a special class.

This boy entered school when he was six, and was fourteen when he came to us. If he had been promoted regularly he would now be in the first year in the high school. Instead he is in the low sixth, or rather he was tried in the low sixth and returned to the high fifth as being unprepared. He has lost, therefore, at least three years and a half. He failed in the first grade, his experience in the second grade is unknown. He failed twice in the fifth grade, once in the sixth, and spent some time in trying to make up losses in a parochial school. Only two pupils in the five hundred in his school system have lost as much time, so that we have here one of the most serious cases of school retardation. The presumption is usually made that retardation to this amount must necessarily be due to a feeble mind. He tested at about eleven years on the Binet scale and at the same age on two supplementary tests for general intelligence. His vocabulary is that reached by two-thirds of the twelve-year-olds. His marks show that he has not excelled in any branch at any time except in writing. His sixth-grade teacher regarded him as naturally stupid. One fifth-grade teacher would place him in the group of normal minds but at the bottom. Another fifth-grade teacher considered him to possess a good mind of which no use had been made. His third-grade teacher gives him credit for possessing a normal intellect. His teacher in the first grade found him dull, stupid, and unresponsive and he was not promoted. I have found very few outside interests of an admirable sort. He likes horses and has worked for several years about a livery stable. The proprietor here regards him as above the average in intelligence about the stable and with teams. He was the most capable member of the group in games, learning rapidly and quickly becoming proficient in new ones. He had a comparatively quick wit, had no difficulty whatever in saying things that gave amusement to the other boys, and often caused the adults present to smile. He was extremely fertile in gestures, grimaces, and postures, and delighted in them. He was never at a loss for arguments in justification of his conduct.

In our examination of him we found that he was densely ignorant of all geographical and historical facts, had an exceedingly fragmentary knowledge of natural phenomena. had never read a book, did not know his multiplication tables, and added by counting. His arithmetical reasoning was practically nil. He did not understand what a fraction was. After lively class discussions he was able to report a few scattered ideas. He read consistently during the time set apart for this but was wholly unable to keep the different portions separated. Often he could not recall anything in entire sections of a book. He could not get interested in *The Call of the Wild*. He was exceedingly clumsy with tools and did not finish properly one piece of work. He did, however, write well and took pride in it. His compositions were easy, sensible, and correct, within the limits of his knowledge. Later his imagination was completely captivated by *The First Jungle Book*, which he read thru. There were times when he learned with unexpected ease and rapidity, and gave unmistakable evidence of native capacity. His intellect seemed at these times to catch a glimpse of light thru the heavy clouds of his ignorance. After three months' daily experience with him I felt convinced that I dealt with a normal intellect astonishingly lacking in the usual idea equipment. There was nothing eccentric, queer, or pathological about his reactions. His mind seemed primitive, untutored, barbarian, to such a degree that it took practically the three months to get a realizing sense of the extent of it. His formal education will have to return practically to the rudiments, if

[1] One case only is described in the *Proceedings*.

indeed he can now be kept in school long enough to accomplish anything. He is desirous of going to work.

The possible causes of this remarkable case of retardation may now be considered. The school facilities have been excellent. He has been very regular in attendance. He has had only the usual childhood diseases. There are no physical defects noticeable. It is to be noted that there was a lack of interest in school from the first grade, and from all reports the retardation of the very first year was never made up. From the beginning, schoolwork had no point of attachment for his mind, and his successive promotions but served to carry him into deeper water. He is reported as being a baby, undeveloped in the first grade, and moreover, sleepy, stupid, and not interested in play. This condition is suggestive of physical obstructions; yet the mother reports that he had uniformly excellent health. One thing only gives evidence of physical peculiarity—he has been exceptional about his diet from his earliest childhood. There have been, however, from the beginning, emotional eccentricities of a noteworthy sort. His second-grade teacher is reported to have pointed him out as the cause of her leaving town. He liked his first- and third-grade teachers, and was amenable to their control when watched. He was very untrustworthy in the absence of the teacher and given to mischief. In later years he became more and more impudent, and now is so insolent and insulting in manner and speech at times as to approach incorrigibility. In recent years he has lived largely upon the street, frequenting the nickelodeons and following up every possibility of excitement. His insolence is but one side of his nature, however. Several of his teachers called attention to a streak of tenderness in him. He takes likings and has moods of amusing docility often, after his outbreaks. He was no hand at picking on small boys, and plainly had his own code of honor. He made a record for truthfulness with several of his teachers and with us gave the impression of believing in his own veracity by leaning heavily on childish technicalities. He was so sensitive about his own ignorance that he made use of any makeshift to conceal it. He would ask questions so simple as to be obviously insincere. He would never by preference work at the board except when he clearly excelled the others, as he did in writing English. Then he was bold and confident. Once caught in ignorance so great as to astonish the class, he would "save his face" by resorting to the mischievous vaudeville in which he was irresistible. His mischief-making was so confirmed that he refrained from it only after the most earnest kind of individual persuasion. He had a record of petty thieving with the local officer, but of the sort that might be construed as exciting adventure. Altogether he is a curious complex of good and evil.

I conclude by remarking that this is an astonishing case of great retardation, both in school and out, and that there is small evidence that it is due to defective intellect. Two causes of sufficient force to account for it are available apart from this. The first is an unprofitable school history due to a failure to make a successful beginning and an accumulated retardation thereafter. This was uncorrected, and if anything aggravated by the influence of an untutored home. Associated with this are undisciplined instincts and emotions, and a complete absence of restraint as a result of maternal negligence and a life on the street.

We have here an exhibit of the most marked cases of retardation in a Pacific Coast town of excellent general population and superior school system. What general statements of value can be made with safety on this showing? They were the noteworthy cases among the boys in a school enrollment of about five hundred.

It is to be noted that aside from the cause of unacquaintance with the English language, so important in some of the large immigrating cities, the

usual causes are well represented. Suppose these causes to be classified as, first, hereditary or congenital; second, hygienic; third, illness; fourth, physical defect; fifth, parental neglect and ignorance; sixth, pedagogical causes, or those associated with inadequate attention in school; then all these are present, the one notable point being that they rarely come separately, but very generally in combinations too difficult of exact analysis. In one case all these types of cause were plainly operative. The importance of these several causes has been sufficiently dwelt upon in the literature of the subject and need not here be further emphasized except in a few particulars. The effect of heredity or prenatal factors is often limited to the explanation of actual feeble-mindedness. It should perhaps be urged that the congenital factor may be of such force as to call merely for greater caution and unusual methods in order to prevent deviation, and that this influence may take rather specialized directions. The matter of the specialization of ability is still poorly understood, but within the group of normals we are led to suspect from the studies made thus far that it is the usual thing.

Parental neglect as a cause, resulting in emotional and volitional disorder, is emphasized in our cases. Learning in school is conditioned largely by what Witmer calls "pedagogical rapport," wherein a deference to the prestige of the teacher and the school and a sensitiveness to its rewards and punishments are such as rapidly to produce a habit of voluntary effort or active attention. Confirmed willfulness at home and undisciplined impulsiveness must undoubtedly figure in the matter of learning. If the child's organic habit after five or six years of poor home training makes avoidance of the painfulness of effort the usual thing, we may be sure the teacher in the first grade will have unusual difficulty in inducing a disciplined attention forthwith, and a bad beginning on this account may establish a backwardness which may not later be overcome without the special attention that is impossible in the teaching of large classes.

Parental ignorance works in a similar way. Thanks to the Herbartian and the more recent psychology of thinking, we now know that learning is quite as much a function of ideas as it is of a mental faculty or organic tendency. All children, then, do not start alike in the first grade by any means. The six preceding years have been very differently employed in the different homes. Different learning power should be the expected thing. The child that has many old ideas to be disturbed by the stimuli of the schoolroom will be the learning one, as contrasted with the one that has been given the minimum of attention and thrown wholly upon its own resources. This may be sufficient to induce first-grade backwardness. And first-grade backwardness is exceedingly significant, in that thereafter the child, instead of being stimulated to normal effort and achievement and habituated to regard himself as one of the group, must endeavor to reach a standard really beyond his powers and inevitably come to regard

himself as a black sheep. No one thing, perhaps, is more essentially disruptive of mental health and good working condition than the sense of personal queerness and unfitness for the normal activities of one's fellows. There is small reason for supposing that first-grade children are different from older people in this regard.

This brings us naturally to pedagogical causes, or those associated with the tuition and administration of school classes. The teachers of these boys were undoubtedly among the best, the first-grade teacher, seemingly, especially efficient. The school system is superior in its organization. No blame can attach to this particular school system for the backwardness of these boys. The teachers uniformly gave of their time after school for extra instruction. But it must be noted that in practically every one of these cases the causes operating were active from the beginning. They managed to stumble along to the sixth and seventh grades, when they needed a greater amount of studying and care at the beginning of their school career than is possible under ordinary conditions. Apparently three of these boys were not promoted after one year in the first grade. There is but one obvious conclusion: retardation must be taken early, and a failure is to be regarded as symptomatic of underlying difficulties demanding careful examination and special instruction, rather than a mere lack of information to be made good by repeating the grade. From this viewpoint the assumption of the statisticians that two years of retardation is not significant is decidedly misleading.

Turning, now, from causes of retardation to its diagnosis, we are compelled to admit that we are lamentably lacking in adequate methods of measuring either status in school acquisition or in mental and moral attitudes. When it is perfected, the Binet, or some similar scale, will aid us in locating the individual broadly in the amount of retardation in development and in distinguishing the defective from the merely backward. But this can be done without giving us a point of departure for a program of cure and correction. For this we must have tests that will locate the kind and amount of backwardness in its infinite complexity and variety. Two of our boys of about the same chronological age show about the same amount of retardation by the Binet scale, yet the pictures they make have very little in common and their future treatment will be wholly dissimilar. The measurement of pedagogical status will be made possible by working out norms of performance in the different school subjects for the school systems from which the individuals come and for the country at large. For the discovery of the types of defect these same tests or others must be constructed in such fashion as to show up the defects in mental attitude and habit as well as the lapses in knowledge and information. Inasmuch as any one subject, such as arithmetic, or literature, or English composition, breaks up into a very large number of constituent elements, the test must cover these various elements, in order that with a minimum of

time and energy the whole characteristic performance of the individual may be laid out plainly before the examiner. The discovery of specialized ignorance will perhaps not give much trouble. It appears already that the discovery of differences in attitude and mental habit is less easy.

The work thus far shows two tendencies: One consists of the use of the categories of pure psychology as bases for testing; the other employs well-defined social products like arithmetic, spelling, and handwriting. The obstacles to the successful use of tests based upon psychological categories are at least twofold. They presuppose a unanimity of mind among examiners far from being yet attained as to what constitutes reasoning, imagination, perception, memory, etc., and they presuppose, also, transference of ability. The noteworthy thing about the tests given by Whipple in his *Manual* is the variety of function the several examiners have attempted to measure by the same test. It would seem that two lines of progress in this matter of testing lie before us. One is to study at length individual tests of the unpractical and psychological sort until there is a consensus of opinion as to their inside psychic significance; the other is frankly to use important social performances like reading, arithmetic, and spelling in their several aspects, whether we fully understand the nature of the processes or not. For the study of pedagogical retardation, in the long run both methods are plainly indispensable, but there can be little doubt of the superiority of the second method for immediate, practical returns. The really important practical matter is to know where the individual stands along the lines of his social equipment.

Coming, finally, to the matter of the treatment of backwardness, we must urge again that it is here we touch the all-essential matter. By all means let us make use of every aid—tests, mental measurements, classifications, definitions, diagnostic devices—that gives the least hope of a more accurate comprehension of the subjects with which we deal. But shall we not keep firmly before us the fact that after all this is merely a necessary preliminary and that our real concern is treatment, cure, control, and—in spite of the Philistines—that odious thing known as "pedagogy"? In the practice of medicine we sometimes hear of physicians making a separate charge upon the patient for diagnosis, as if one cared in the least for a diagnosis when professional treatment is necessary to a cure. Furthermore, one excellent way of judging a diagnosis is by the degree of success yielded by the treatment based upon it. Notwithstanding the speaking obviousness of these considerations, pedagogy is in disrepute, for reasons that need not now concern us. In university circles the word is either anathema or a recognized source of academic levity. Even within departments of education it is often considered too frivolous a topic for stern scientific minds, and we are quite accustomed to seeing ambitious young men, in a position to do something of value in the teaching of special branches, hasten away to teachers' colleges to align themselves under more

dignified standards, such as the history, administration, theory, psychology, sociology, or philosophy of education. The farther they get from actual teaching the more impressive they become. Now, successful teaching and good pedagogy amount to the same thing; therefore pedagogy needs rehabilitation. If it shall be necessary to sacrifice to tradition this good old word, let us do it with what heroism we can. Words equally good have gone to oblivion. The idea is the thing.

There is comfort in the small beginnings of a better pedagogy to be noticed here and there. There is much help to be had from the newer logic if students will but study it with an open mind and apply it with discrimination. The special pedagogy of experience has much of value in it, and awaits quantitative appraisement. The new *Journal of Educational Psychology* forecasts the appearance of carefully conducted studies on the different approaches to the several branches of culture. Unless the writer errs, there is much to be hoped for from the care and instruction of backward children. There is something very tangible and appealing about the reform of a disordered or arrested intelligence. The appeal is at once spectacular, humanitarian, and scientific. A method or methods or a pedagogy that can bring about such concrete consequences commands attention and respect. Who knows but what this respect might carry over to the extent that teachers might be graded by the public on a basis of performance rather than on the criteria of pleasing address and the capacity for frightening boys? As physical valuation is necessary to the adequate taxation of railroad properties, so measurable results are needed for the right estimation of teaching talent and method. Remuneration, then, will reflect differences and salaries will improve, not from motives of kindly consideration to a deserving and overworked class of rather innocuous public servants, but from the far more effective and honorable respect and esteem which attaches to anything worth having and hard to get. Another advantage which must inevitably come to pedagogy from a study of individual cases is that which is involved in the proposition that individuals in the normal and supernormal group are by nature and circumstances unique. No study of mass results can hope to accomplish what is available from the thorogoing study of one organic mind. Because all minds are different, a general method or pedagogy must always be varied for the case. Because minds are more alike than different, a general pedagogy is possible. The speaker will not easily forget the discipline he received as he observed the responses on the part of these few individual boys to his time-honored practices. He made a firm resolution to do better. This in itself is result enough for a preliminary trial and may well serve as the concluding item in this casual report.

HEALTH AND VENTILATION

LEONARD P. AYRES, ASSOCIATE DIRECTOR, DEPARTMENT OF CHILD HYGIENE, RUSSELL SAGE FOUNDATION, NEW YORK, N.Y.

For more than a year past, Dr. Luther H. Gulick,of the Russell Sage Foundation, has been conducting a series of investigations of the ventilation of buildings. This paper is based on his work and may be considered, in a modest way, to be a partial preliminary report of his investigations.

In the past twenty-five years the civilized world has succeeded in solving a problem on which it has been working for many centuries and now it is bitterly disappointed in the result. By the use of modern building methods it has succeeded in constructing air-tight dwelling houses in which midsummer temperatures may be achieved in midwinter. As the race has struggled onward and upward from life in the open to life in dens and caves, and thru the centuries of dwelling in thatched huts, log cabins, and finally in modern houses, its progress has been marked by successive and successful efforts to ward off the rigors of winter.

Finally—and only in very recent years—these efforts have been crowned with success, and now we have reached the point where we can and do maintain summer temperatures in our homes despite the coldest and most inclement weather out of doors. Unfortunately we are discontented with the results of our triumph. A prolonged stay in these warm, air-tight rooms makes us irritable. We fuss and quarrel over trifles. We have headaches, colds spread among the members of the family with wonderful vigor and celerity, the servants leave, the children are fretful, the meals are awful, marriage is a failure, and everything chooses to go wrong rather than right.

Moreover, these unfortunate results are found not only in our dwelling-houses, which are commonly much heated and little ventilated; they are found in an almost equal degree in our costliest and most modern schools and public buildings, in which we have installed batteries of furnaces and boilers and powerful fans which draw out the old impure air and force in new and bounteous supplies of fresh, heated air. Each year we spend something like three hundred thousand dollars in installing these modern heating and ventilating plants in our city schools and the result is an ever-swelling chorus of protest and complaint from those who are compelled to enjoy their supposed benefits.

The one fundamental cause for this colossal failure seems to be that we have constructed our ventilating systems on the theory that the best air to breathe is air containing the lowest possible percentage of carbon dioxid and have utterly overlooked the fact that the truly important desideratum is not a low percentage of carbon dioxid, but a proper relation of temperature and humidity.

This trust in the efficacy of the carbon-dioxid test is reflected in our ventilating laws, where such laws exist, which almost invariably provide

that the air in public buildings shall not be permitted to contain more than very low, specified proportions of that gas. Now we are confronted with the startling revelation based on a long series of perfectly reliable scientific experiments, that the proportion of carbon dioxid in the air we breathe has no significance whatever, either as being harmful in itself or being a trustworthy indicator of the presence in the air of other harmful substances. Hand in hand with this discovery go other equally trustworthy scientific results demonstrating that humidity is the important factor in the problem of ventilation.

In the tropic seas the presence of the pilot-fish gives warning that sharks are near. If the fishermen, for the protection of their industry, made war on the pilot-fish as a means for exterminating the sharks, we should think that they had attained the pinnacle of human folly. In the fight against bad ventilation, carbon dioxid is the pilot-fish—and a counterfeit pilot-fish at that—against which we have been waging futile warfare; while deficient humidity is the death-dealing shark that has lurked unseen but ever-present in the background.

Our great store of misapprehension and misinformation about carbon dioxid has been steadily growing since the identification of the gas by the great scientist Lavoisier, one hundred and twenty-five years ago. For three-quarters of a century after this discovery scientific authorities agreed that the harmful element in impure air was this poisonous gas. Then, fifty years ago, came the German chemist, von Pettenkofer, who proved that the symptoms produced in overcrowded and ill-ventilated rooms were not the result of an excess of carbon dioxid. Nevertheless, he formulated the rule that, while the gas itself is never present in quantities sufficient to cause physical harm, unless artificially produced by such causes as manufacturing, its presence in considerable quantities does offer a trustworthy index or indicator of the presence in the air of other harmful impurities.

Just as von Pettenkofer demonstrated the invalidity of the theory that carbon dioxid is the harmful element in impure air, so later scientists have demonstrated that he was wrong in concluding that its presence was an indicator of the presence of other harmful impurities.

Our ventilating laws specify that the percentage of carbon dioxid in the air of buildings shall not be permitted to exceed from seven to ten parts in ten thousand, and our ventilating systems are built to keep the amount of the gas within these limits. Recent investigations have been conducted in France, Germany, England, and in Wesleyan University in this country, in which persons have been enclosed in air-tight glass or metal chambers, and careful observations made of the physical and mental results of varying conditions of atmosphere. In these chambers the subjects have lived and worked for days at a time in perfect comfort and unimpaired good health in air contaminated to an almost incredible degree. The normal proportion of carbon dioxid in outdoor air is about three parts

in ten thousand; the greatest amount permitted by ventilating laws is commonly ten parts; in these experiment chambers the proportion has risen as high as two hundred and thirty-one parts, or eighty times the normal amount, without any bad results whatever.

Almost more surprising are the experiments conducted at the University of Minnesota with cattle. In one case a steer was confined in an air-tight stall for thirty-seven days and lived in perfect comfort and robust health. He made true and steady gains in weight and seemed not to suffer in any way. Another steer was kept for twenty-eight days in a stall rendered as air-tight as possible. This animal's horn was accidentally broken, but not only did he enjoy perfect health and comfort, but his wound healed with remarkable celerity in an atmosphere so contaminated that the carbon dioxid content rose to ninety times the normal.

There is an equally convincing mass of evidence demonstrating that the important factor in ventilation is humidity. When we heat our homes to seventy degrees in winter time, we are trying to reproduce balmy June weather indoors. What we entirely overlook is the fact that when we take a cubic foot of out-door air at a temperature of thirty-two degrees and heat it to seventy degrees, we have multiplied its capacity for holding moisture three and one-half times. The result is thirsty air, having a true avidity for moisture, and finding it most readily in the bodies, throats and lungs of the occupants of the building. In all of this discussion I am of course using the term "air" in its popular, not its scientific significance.

A hot climate is considered dry when the average relative humidity falls below 60 per cent. In the average schoolroom the relative humidity is less than 30 per cent. It is an actual fact that the driest spots of the deserts of Sahara and Arizona are more moist and humid than many of our schools. This is why plants will not grow in schoolrooms. They are parched to death. This, too, is why children will not grow in schoolrooms, and only survive because they spend most of their time elsewhere.

The solution of the problem lies in artificial humidification, which is now being successfully applied in dozens of schools and which has long since passed the experimental stage. Its effectiveness can only be appreciated by seeing what it accomplishes. It produces comfortable and healthful atmospheric conditions at a lower temperature and with a consequent saving in fuel over the old systems.

A recent impressive illustration occurred last winter during the final stages of construction of a Connecticut school building equipped with humidifying apparatus. During very cold weather in December, the carpenters employed on the inside finishing work complained of the cold with the thermometer at seventy-five degrees. The foreman did not wish to force the temperature higher because the new woodwork was already opening badly at the joints. Suddenly his discussions with the architect about the new humidifying apparatus occurred to him, and he had the

steam turned on in the fresh-air chambers. Soon frost began to appear on the windows, and in three hours the cracks in the new woodwork were entirely closed.

The most remarkable results, however, were the effects of the humidity on the workmen. Before the steam had been on for half an hour, the men who had been complaining of cold began to take off their coats and then their vests. The temperature was lowered and soon the men were happily working in their shirt sleeves with the temperature at sixty-eight degrees.

At the Horace Mann School in New York City the engineer in charge will take you into the basement and show you how the air first passes thru a curtain of steam coils, where it is heated to a temperature of sixty-four degrees. A great fan then draws it over a tank of steaming water, and drives it thru a set of flues to the 150 rooms upstairs, where it enters at a temperature of sixty-six degrees. Because of the humidity in the air this temperature is found entirely comfortable, and except for a few rooms in the most remote parts of the building, the problem of ventilating that school is solved and solved correctly. Moreover, the low temperature maintained results in a saving of 10 per cent in cost of fuel.

How rational all this is becomes apparent on a moment's thought. In early spring we often sit out of doors in perfect comfort in temperatures that would cause us to shiver in our rooms in the winter. The real difference in quality between the two atmospheres is not a question of heat and cold, but of humidity. This is the balance wheel which regulates our comfort at different temperatures.

There is no single physiological explanation of the harmful effects of the hot, dry atmosphere common in schoolhouses during the winter months. The whole matter is complex. In the first place, there is the very serious question of dust. This does harm in various ways. It lacerates the delicate surfaces of the breathing tract, parched by the desiccated air, and so makes ideal resting-places for the pathogenic germs which it carries with it as it is blown about in the air. This is the explanation of the marvelous spread of colds in such buildings.

In the second place, the artificially dried atmosphere produces feelings of discomfort, irritability, and disinclination to mental work. This is because of the effect of the dry air on the skin of the body. Most of our sensations come from the skin. In rooms where the air is pure, but nearly stationary, and artificially dried, the blood in the body rushes to the skin in order to start up a gentle perspiration in the endeavor to reduce the temperature. Thus the body becomes surrounded by an envelope of warm, moist atmosphere, producing useless perspiration. This causes great restlessness. More serious still, the blood is engaged in dilating the small blood vessels at the surface of the skin, when it ought to be engaged in flushing the brain, and helping it to solve problems in arithmetic and to assimilate facts in history and geography. It cannot perform both func-

tions at the same time so it deserts the brain and devotes itself to the skin all over the body surface. This is the explanation of the great difficulty experienced in trying to teach children in superheated, kilndried schoolrooms.

All authorities on ventilation insist that where plenum systems are in use classroom windows must not be opened, and they demonstrate the reasonableness of their command by tests showing the purity of the classroom air. There is no teacher but has violated the rules, and in despair opened the windows; and there is no teacher but has been surprised to note the beneficial results on the mental attitude and ability to work of the children. The explanation is that, while the air was comparatively pure, it was dry and not fresh. Opening the windows put the air in motion, broke up the body envelope, replacing it with a layer of cooler air, and released the blood, so that it could return to the children's brains.

This all shows that there are other factors in ventilation even more important than the chemical purity of the air. One of these factors is change of temperature. The necessity for this is illustrated by the success of the experiment of opening the windows from time to time. No heating system can possibly succeed that maintains an even temperature. The reason is that we are changeable creatures, accustomed by nature not only to withstand, but to require, variations and needing from time to time the stimulus of cold air. There is no one best degree. We all need changes from time to time.

To summarize: The solution of the problem of ventilation lies in attacking the dangerous shark of desiccated and thirsty air, and ignoring the counterfeit pilot-fish of carbon dioxid. The three prime requisites for better conditions are greater freedom from dust, more humidity, and lower temperatures. These conditions can be secured in our existing schoolhouses as well as in those constructed in the future and at no prohibitive expense.

Eighty-nine cities are already cleaning their schoolhouses with vacuum cleaners, and the number is rapidly increasing. This is the solution of the dust evil. Aitkens has shown that the number of dust particles in a cubic inch of air ranges from eight thousand in the country to fifty millions in some city streets. Riding about on these dust particles are bacteria numbering sometimes as high as two million to a gram of dust. These constitute the argument for vacuum cleaning. The time is coming when we will keep our schools as clean as our hospitals and for the same reasons.

The next requisite is greater humidity. This is obtained by drawing the heated air over shallow pans of water heated by steam pipes or by injecting steam directly into the hot air flues. A number of companies dealing in heating and ventilating apparatus have developed satisfactory means for insuring a proper condition of humidity and at least one concern is now marketing a small apparatus for use in small buildings and rural schools.

After the proper humidity has been secured, the question of heat is easily dealt with, for rooms are then entirely comfortable at much lower temperatures. The best combination seems to be a temperature of from sixty-six to sixty-eight degrees with a relative humidity of about 60 per cent. The degree of humidity is measured by an instrument called a hygrometer, which in its most convenient form is a combination thermometer and hygrometer, and should form part of the equipment of every schoolroom where automatic control of both temperature and humidity is not a feature of the heating and ventilating system.

The marvelous success of the open-air school is attracting worldwide attention, and city after city across this and all other civilized countries is now opening schools of this new type. The conditions necessary for success with the open-air school are neither possible nor desirable in all schoolrooms, but it is both possible and desirable to obtain conditions of ventilation in every classroom that shall insure pure, fresh, and health-conserving air.

This need is now recognized by schoolmen and the possibility of solving the problem is admitted by school architects and heating and ventilating engineers, who are even now discarding their traditional ideas of ventilation and constructing school buildings with the avowed object of bringing to every boy and girl the advantages hitherto reserved for the tuberculous.

THE INFLUENCE OF OPEN-AIR AND LOW-TEMPERATURE SCHOOLROOMS ON THE MENTAL ALERTNESS AND SCHOLARSHIP OF PUPILS

FRANK G. BRUNER, ASSISTANT DIRECTOR, DEPARTMENT OF CHILD STUDY AND EDUCATIONAL RESEARCH, PUBLIC SCHOOLS, CHICAGO, ILL.

Less than ten years ago a discussion of the topic of the open-air schoolroom would have been impossible, for the simple reason that aside from an isolated experiment at Charlottenberg, in Germany, seven years ago, there existed no material upon which to base it. The idea of placing children for teaching purposes under low-temperature conditions or in the open air is distinctively new. It marks a change in emphasis, in consideration of the child's and youth's education, from an almost exclusive regard for his mental equipment to a concern for his more comprehensive needs—the whole child in all of his relations. Yet many of us permit ourselves still to be misled by the belief that education is a dual or multiple process, one set of activities having to do with mind, another with brawn, another with culture, and still another with morals, etc. Educational effort all too largely has simply failed to conceive that the child as a whole, his development as a coherent process, and his individuality in its integrity, should form the point of attack. Education, according to modern most progressive views, is concerned not alone with activities and processes, but

with the total environmental surroundings conditioning the child's growth and development. Comfort as regards seating, favorable lighting conditions, the elimination of physical and sensory abnormalities and handicaps, an optimum temperature in which to work, provision for a wholesome supply of fresh air; in fine, the entire routine of hygienic school accessories are quite as much educational questions, and are so considered, as the place of numbers in the school curriculum or the methodology of the teaching of reading. As educators we should be concerned rather less with the efficiency of teaching methods and the immediate successes of our children and youth in the pursuits and callings which they will enter after leaving our schools; but we ought to be rather more concerned that the child's environment be such as to minister to a healthful development and growth. Happily, if the space allotted to hygienic questions on educational programs affords any criterion, this desideratum is at hand. We are coming to consider the child in his entirety, to know that the mental and the physical are not dual interacting organic processes, but that in relation to growth and development they are identical; that what ministers to one, ministers to the other equally; that fresh air and wholesome food are as essential to mental as to physical efficiency; and conversely that an active mind and congenial surroundings make for a sound body as well as a sound mind. This leads us directly to a consideration of the topic under discussion—open-air and low-temperature schoolrooms.

It may be inquired as to what is meant by low-temperature and open-air schoolrooms? The open-air classrooms as operated in Chicago, New York, and most other places are pretty much alike. The first in Chicago were operated on the tops of buildings. Some are now conducted in regular classrooms with windows wide open and the provisions for heating not in use. In other respects the roofrooms and open-window classrooms are identical. In the roof classrooms a roof protects the children from the rays of the sun and rain, and for walls there are used removable windows of muslin cloth. On the side of the room away from the wind these windows likewise, altho permeable to air, are removed, even during the coldest weather. Of course the rooms are not heated, but on very cold days the child, in addition to his own clothing, is provided with an Eskimo suit, a blanket, and a soapstone foot-warmer. The enrollment is limited to twenty-five.

The children for these rooms are selected by the regular school physician in consultation with the medical specialist who directly supervises the open-air classes, and they are entered only upon the approval of their parents. Of course, membership in these centers is limited to those who are tubercular, in the active or latent stage, and to those so anæmic that there is danger that tuberculosis will ensue.

The routine of the school day varies significantly from that in the regular classrooms. On reaching school in the morning the child is first given a

bath in the school bathroom. He is then given a breakfast consisting of an egg, some oatmeal porridge, and all the milk he will drink. Then with frequent interspersions of physical exercises, games, and drills he pursues the ordinary school work till noon. At noon he is provided with a heavy soup or broth, two soft-boiled eggs, bread, butter, and jelly, a simple dessert, and again all the milk he will drink. After the noonday meal, partaken of within doors, the children again repair to the open air, and on cots provided for the purpose, and snugly wrapped in woolen blankets, sleep for an hour. They are then awakened and they pursue their regular school work until a quarter past three, when they return to their homes for the night, just as do other children.

In all of the exercises of the day pains are taken that the child shall enjoy every freedom that does not partake of license. He arises from his seat and walks about the room whenever he chooses, the aim being to maintain a cheerful and unstrained mental attitude, so that the circulation, digestion, and assimilative processes shall be stimulated and kept at a maximum. In these rooms the temperature and humidity of course fluctuate with the out-of-doors atmospheric conditions.

It will be seen from what has just been detailed that several factors other than pure air must be taken into account as possibly contributing to any mental alertness and improved scholarship that may result. They are: (1) a higher relative humidity, (2) a liberal provision of nutritious food, (3) a smaller class membership (twenty-five as compared with fifty in the regular classes), (4) a freedom from restraint and consequent lowering of nervous tension and nervous dissipation, (5) a period of complete relaxation and recuperation in the middle of the day. So far as my knowledge goes, no attempt has anywhere been made to isolate these factors in a scientific manner, so as to determine the relative influence of each in contributing to health and accelerated mental growth. It would be clearly illogical to ascribe all of the improvement to the open-air régime. Indeed, one would be clearly unwarranted in selecting any one of the factors enumerated and attributing any improvement noted to it alone.

We are practically altogether at sea regarding differences in constitution between impure, vitiated air and pure, wholesome air. We do know, however, that delicate tuberculous children and adults become stronger and get well out of doors, while they become weaker and die when confined in rooms in which others live with them, such as schoolrooms, dwelling-houses, and factories. Purity of the air, especially in cities, moreover, is affected by a number of complex factors, other than those simply of ventilation. Among others are the construction of streets, the amount of dust raised by vehicles of transportation, the disposition of waste materials in alleys and streets, noxious gases and soot particles thrown out of chimneys which inevitably find their way into the air passages and lungs, bad teeth, noxious catarrhs, dirty clothing, and the unclean, ill-smelling

bodies of those occupying the same room. It is thus not safe always to assume that the air is pure and vitalizing because one is out of doors.

It has been estimated that between thirteen and twenty thousand tons of sulphurous dioxid, not to mention particles of carbon in the soot, are poured into the air daily from the burning of fuel in such centers of population as Chicago and New York, thus poisoning the air which must be breathed. Decaying cavities in teeth—and 60 per cent of children in many neighborhoods are afflicted with bad teeth—and chronic catarrhal conditions of the nose and throat are sending out millions of harmful bacteria all about us. The odors arising from putrid and catarrhal conditions, dirty clothing, and unsanitary bodies exercise a depressing influence on mental and physiological activities.

Dr. Segwick examined the contents of a cubic foot of air five feet above a macadamized street of a city when the dust had been raised by a brisk wind and found it contained approximately six hundred thousand microorganisms, many of them extremely injurious. Fortunately most microbes do not get into the system. They are filtered out and oxidized in the upper air passages of the nose, which are peculiarly constructed to perform this function, and especially if the individual habitually breathes thru his nose; but some, notwithstanding, find their way into the lungs.

But what is the main defect in the air of rooms poorly ventilated that makes it depressing and unfit to breath? Investigations have been numerous seeking to determine what are the constituents of expired air that make it unwholesome. The popular belief is that it is due to the presence of CO_2. But careful experimental investigations have proven conclusively that only under extremely extraordinary conditions is the amount of CO_2 in a room in which people are living, or in a classroom or lecture-room, sufficient to affect, in any detectable manner, the physiological processes or mental work of an individual. Indeed, only a few instances are on record in which the ratio of eight parts in ten thousand—the alleged perfectly safe normal ratio—has been exceeded. Artificial ventilating systems which supply above one thousand five hundred cubic feet of air per hour for each inmate easily keep the quantity of CO_2 below the required ratio. The Massachusetts law requires that the inflow of fresh air per person shall exceed eighteen hundred cubic feet, so that in classrooms the air practically never contains an injurious excess of carbonic-acid gas.

Pure air, moreover, does not imply that air shall be rich in oxygen and ozone. More oxygen does not necessarily mean more vitality. Concentrated doses of oxygen, indeed, in amounts of one part to two hundred and fifty act as a poison on the human organism. They induce convulsions, inflammation of the lungs, and death. There is a small quantity of free ozone to be sure in the air, but ordinarily this does not reach the lungs; it is caught by the organic matter in the air passages leading to the lungs, oxydizing it and helps, therefore, to purify the air, but even a norma

quantity of free ozone in the air may induce nasal catarrh, bronchitis, and asthma by the constant irritating of the mucous surfaces with which it comes in contact.

With reference to the anthropotoxins (the organic matters) exhaled in respiration, Brown-Sequard, Billings, Mitchell, and others have given us some definite experimental data upon which to base a conclusion. When expired air is condensed and liquefied, there results a clear, odorless liquid which contains only a trace of organic matter. Its effect on guinea-pigs and human beings when taken internally or injected into the blood is found to be wholly indifferent and harmless. Other experiments in which mice were compelled to breath the expired air, each of the other, when other conditions were normalized also gave negative results. The conclusion is thus forced upon one that other factors than deficient oxygen, excess of CO_2, or the presence of anthropotoxins are responsible for the devitalization of indoor air.

Of late there is a disposition to attribute the stuffiness and deadness of air in heated schoolrooms and dwellings to its lack of moisture, its low relative humidity as compared with the out-of-door air. In the lake region in which Chicago is located the average outside humidity is in the neighborhood of 72 per cent, varying greatly, to be sure, from day to day, with fluctuations in temperature. In artificially heated rooms (schoolhouses, factories, and dwellings) the average relative humidity rarely exceeds 30 per cent. In Nebraska the relative humidity of artificially heated rooms seldom gets as high as 20 per cent for the winter months. These differences between the moisture indoors and out of doors are striking, but out-of-door variations are often quite as pronounced. Along the California coast, day after day, the average relative humidity may approach 100 per cent at dawn and fall to 22 per cent at noon. At Denver the out-of-door mean relative humidity for the entire year is only 42 per cent.

Attempts have been made to overcome the great differences between out-of-door and indoor relative humidity by a process of humidifying the air, and if we are to believe reports the results have been gratifyingly satisfactory. The air in the American Bell Telephone Building at Boston is kept at a relative humidity of 50 per cent by injecting into the entering hot-air current a jet of steam; 675 gallons of water (twenty-two barrels) in the form of steam is required for this purpose every ten hours. The practice of humidifying the air was followed also in one of the Chicago school buildings, but the results were not accurately tabulated, so it is impossible to state just how much the air was humidified. A few years ago some careful experiments on humidifying air were made by Professor Loveland at the University of Nebraska. These covered thirty days. Two seven-room houses, alike in construction and each heated by a hot-air furnace of the same make, were selected for experimentation. It was found that to raise the relative humidity of one 10 per cent above the other, as indicated

by the hygrometer—i.e., from 20 per cent to 30 per cent—it was necessary to evaporate sixty-four gallons of water daily. It was further demonstrated that the ordinary furnace or radiator pan, or vessels of water placed about rooms, affect the humidity so little that it is not registered by the hygrometer, which means the influence is less than a fraction of one per cent. Most persons will testify to feeling a considerable difference in the character of the air as a result of such evaporating devices, but the difference is unquestionably psychological rather than physical.

At the Boston Telephone Building it is asserted the rooms are as comfortable with a temperature of sixty-nine degrees Fahrenheit, relative humidity 50 per cent, as they formerly were at seventy degrees Fahrenheit and the drier air. The relation between dry or humidified air and bodily comfort is by no means a simple one. To determine exactly what this relation is requires a finer and more discriminating line of experimentation than has yet been undertaken. We know, for example, that a temperature of eighty to eighty-five degrees Fahrenheit with a high relative humidity is more oppressive than a temperature of ninety degrees Fahrenheit with a very low relative humidity. But what are the physiological effects of high and low humidity in temperatures ranging from sixty to seventy-two degrees Fahrenheit we know little or nothing definite. After all, it is not the relative humidity of the air which is significant in affecting vital processes so much as the air's thirst or drying power. Thus air at fifty degrees Fahrenheit with a relative humidity of 36 per cent and air with a temperature of eighty-six degrees Fahrenheit and relative humidity of 80 per cent have exactly the same drying power. That is, to become completely saturated, each requires the same quantity of watery vapor per unit volume. A cubic foot of air at fifty degrees Fahrenheit, relative humidity 36 per cent, and a cubic foot of air at eighty-six degrees Fahrenheit, relative humidity 80 per cent, will each absorb .0,003,756 pounds of water, and hence the effect on the mucous tissues of the nose, throat, and lungs ought to be the same, altho a relative humidity of 80 per cent, eighty-six degrees Fahrenheit, is considered high, while a relative humidity of 36 per cent is thought of as very low, when dissociated from the temperature of the air. Arid climates are generally not thought of as being particularly conducive to catarrhal affections. Neither do the wide ranges in humidity experienced along the California coast during the course of each day seem to be particularly unhealthful. Places of low relative humidity indeed appear to be famous as health retreats for those afflicted with bronchial and lung troubles. In truth, the humidity factor is still very largely an undetermined one, and before one can become assertive more will have to be learned as to how it affects physiological functions, and that under careful experimental conditions. Whether a room not heated beyond sixty to sixty-eight degrees Fahrenheit, with a relative humidity of 60 per cent, or 70 per cent, is as comfortable as one heated to seventy-two degrees Fahrenheit, relative humidity 40 per

cent is also still problematical. Dr. Hill claimed to have gotten very good results with a schoolroom temperature of fifty-seven to sixty degrees, relative humidity 70 per cent. German and English homes, moreover, are rarely heated above sixty-nine degrees Fahrenheit, but these peoples have accustomed themselves to a lower temperature. They are healthy, but whether under our different climatic conditions this would be true generally remains yet to be determined. In Germany and England sudden wide fluctuations in out-of-door temperatures do not occur. Rises and falls in temperature from twenty degrees to forty degrees Fahrenheit do not occur within the space of a few hours, as is common in the lake states, and their human organisms are not subjected to the strain of sudden adaptations to the changes they are unprepared for as are ours. These sudden adaptations and other factors yet to be determined must be reckoned with in a consideration of the optimum condition of the air for good health. Three factors conditioning the results obtained in open-air and low-temperature rooms have yet to be considered: (*a*) the influence of a small class enrollment; (*b*) the period of complete relaxation and rest in the middle of the day, and (*c*) that of wholesome food and proper habits of eating.

Inasmuch as the open-air rooms look to the improved health rather than to a bettering of the scholarship of the children, a general freedom and feeling of lack of restraint was encouraged. This is possible with an enrollment as small as twenty-five, whereas it offers a problem far more complicated when a teacher has larger numbers to handle. The children were encouraged to be happy, to forget their afflictions and the handicaps which caused them to fall behind in their classwork. The emotional reactions were striking. Truant habits were broken up, the aforetime helplessness and mental indifference disappeared, and a consequent alertness and spontaneous interest in the routine of the school work developed. Not the small enrollment, to be sure, nor any other one factor alone was responsible for this change. It is more probable that each contributed its share, of which the part due to the small enrollment unquestionably was not insignificant.

It seems like indulging in platitudes to mention the rôle played by the factor of wholesome food. Many of the children coming to the rooms were injudiciously fed, and nearly all underfed. So weak, anæmic, and impoverished were their little bodies that even a modicum of mental vigor was altogether impossible. With the increased metabolism and the building up of their physical organisms there followed, very obviously, an acceleration in the mental responsiveness, which in the absence of all other factors would of course have been clearly manifest.

The importance of the last factor, that of complete relaxation and rest, is not often considered. Its significance, too, it is to be feared, is altogether too lightly held. During the past two or three decades a not inconsider-

able number of studies have been made of school children, all pointing to the fact that the curve of fatigue during the school day runs astonishingly high. The reaction of the results of these fatigue studies has been in the direction of a rearrangement of the daily program, so as to put difficult and taxing studies at those hours when the fatigue curves were least manifest and to fill in the periods of high fatigue with recreation exercises. The advisability of allowing the children opportunity for complete relaxation, sound sleep, with a lowering of the pulse rate, a slowing down of respiration, a diminished metabolism, and a consequent recuperation of the nerve centers, had not received notice until put into practice by those dealing with children of low vitality and physical depletion—those with tubercular and anæmic tendencies.

The effect of this daily siesta in the way of enhancing the children's physical vigor and developing an increased mental alertness and plasticity, it is perfectly logical to believe, must be very striking. It doubtless contributed no small part toward developing more efficient school reactions on the part of the children in the open-air and low-temperature rooms.

Chicago's experiment with this special class of schoolrooms has been too brief for us to become dogmatic. Yet some results which are fairly astounding have been attained. It is really unfortunate that it is impossible to isolate, differentiate, and assign the proper weights to the several factors responsible for them. On the mental side alone, children who had shown three and four years of retardation in their studies were able to complete the school work of one and a-half, and in four instances of two, grades in a single year. The truant records which followed many of the children of the schools disappeared. The discipline cases vanished, and the forcing process on the part of the teacher was displaced by a wholesome individual initiative and interest. The maximum number of taps that could be made in a minute's time with tapping device, in the course of three months, increased from 4 per cent in some cases to 23 per cent in others. There was observed an increased adaptability, a greater resourcefulness, a keener insight in the unraveling of puzzling situations, and appreciable development in persistence and tenacity in solving difficult and complex problems.

The fruits which the open-air and low-temperature rooms have yielded are well worth the financial outlay entailed, when the heightened physical and mental efficiency of the children, who were enrolled, are taken into account. A large percentage of the two hundred odd children who were given these special advantages would otherwise unquestionably have succumbed as a result of the deadly inroads of tuberculosis, and the economic loss resulting from the death or the physical and mental impairment of a growing individual is easily reckoned. In the aggregate the economic waste, aside from humanitarian considerations, would have been tremendous. As it stands, the children have been developed into producers, and thus

thru their contributions to society will far more than remunerate it for the additional expense incurred in a few months of their special education.

The possibilities, however, of making such school advantages as obtain in the open-air rooms more universal, rest largely upon financial grounds. The increased per-capita cost incident to maintaining such schools is of course prohibitive when considered in the large, and until some means for obtaining school revenues not now available is at hand, open-air rooms will have to be limited to those children whose health is in peril. They will have to be considered in the light of instrumentalities for recovering those who have gotten beyond the reach of the ordinary school and health agencies.

But the experiment of the open-air and low-temperature rooms has had a wider import. As in the case of most activities for the amelioration of the condition of the unfortunates, there has resulted a reflex effect upon the habits and methods of ministering to the needs of normal individuals. Were no other effect manifest, the reaction which open-air rooms have had in directing attention to the proper ventilation of schoolhouses, dwellings, and factories, to directing attention to the need for pure air—as near out-of-door air as possible—on the part of all individuals, would be abundantly worth the effort and expense entailed. Only recently and all unconsciously has the human been making the transition from an out-of-door to an indoor dwelling animal and it always requires a rather intense agitation to bring to an individual's consciousness the necessity for modifying the conditions of his habitat so as to make his readjustment to a new order of life safe and wholesome. Such the focus of attention upon open-air schoolrooms, it is hoped, has accomplished.

OPEN-AIR SCHOOLS

LEONARD P. AYRES, RUSSELL SAGE FOUNDATION, NEW YORK, N.Y.

The report of the recent United States Census will tell us that the greatest industry in San Francisco is that of trade, in which some twelve thousand merchants and dealers are engaged. It will further tell us that the greatest sedentary class in this city is that made up of clerks and copyists, including a total of some nine thousand people. Altho these will be the official figures, they will be wrong; for the greatest industry in San Francisco is not trade, but education; and the greatest sedentary class is not made up of the clerks and copyists, but rather of the fifty-five thousand people engaged in teaching and being taught in the public and private schools.

A similar condition exists in every city thruout the land. Everywhere the largest as well as the oldest organized industry is education, and everywhere the greatest sedentary class is made up of our school children. It is only within the last few years that schoolmen have begun to ask what

effect these long years of sedentary, indoor life have on the physical welfare of our school children, but now they are awakened to the significance of the problem they are facing it squarely and acting energetically.

Ten years ago the National Education Association met in Detroit and discussed the problems then foremost in educational thought and action. Diligent search thru the printed report of that meeting discloses no single address devoted to the physical welfare of childhood. On this year's program in San Francisco no fewer than twenty-six papers are devoted to the subject of health.

This profound change reflects no temporary fad or passing whim. It means that a fundamental change has taken place in educational ideals. It means that schooolmen have come to a startled realization that compulsory education under modern city conditions too often spells compulsory disease. Except our jails and our insane asylums, our schools are the only institutions where attendance is compulsory, and fortunately few of us have to attend our jails and insane asylums long or frequently. It is a tardy realization of the significance of this feature of compulsion that has brought us to see that when the state compels every child to attend school, it incurs the obligation of furnishing an education fitted to the needs of every child.

This necessity has brought schoolmen face to face with the problem of what to do for the child who is in poor physical condition and is at the same time compelled to attend school. The solution was found about seven years ago in Germany in the open-air school, in which the ailing child could continue his education, and at the same time regain his health. This educational innovation combined the best features of the sanatorium, the playground, and the school. The classes were held in the open air, the children were well fed and warmly clad, and the school work was cut in half.

The results were marked and immediate. The children who had been chosen for the new school because they were pale, pinched, thin, and anæmic, became in a few short weeks strong, rosy, and healthy. They put on weight and gained in mental alertness. Altho they spent less than half as much time at their lessons as the normal children in the regular classes, they made even better progress. The working plan of the new type of school has been summarized as consisting of double rations of air, double rations of food, and half-rations of work; and it may be added that the result was double portions of progress, both physical and mental.

So complete and convincing was the success of the first school that its fame spread abroad, and in quick succession other similar schools were opened thruout Germany, in England, and in France. The credit and honor of starting the first open-air school in America must be shared by New York and Providence. In 1904 the former city loaned the services of one of its public-school teachers and supplied school material for teach-

ing the children of an out-of-door hospital for tuberculous children. The first American open-air school, as that term is now understood, was opened in the city of Providence, R.I.

In the year 1907 there was in that city a group of children whom the medical inspectors had noted as being particularly thin, sickly, and emaciated. The solution of the problem that these children presented offered a splendid opportunity for co-operation between the educator and the school physician. If these children were kept in the regular classrooms it was evident that they would continue to go downhill physically. If they were excused from attendance at school, there was no place for them to go, and plainly they would suffer educationally and probably would be no better off physically.

The solution came in January, 1908, when the school authorities of Providence remodeled a schoolroom of an abandoned building so as to convert the ordinary four-sided room into one of three sides, leaving one entire side open to the air. In this room they began in the dead of winter to teach a class of children variously termed anæmic and pre-tubercular. The children wore their outdoor wraps, sat in warm sitting-out bags, and on cold days had warm soapstones at their feet. They were well fed, and their school studies reduced in quantity but not in quality.

Immediately they began to improve both physically and mentally, and, just as in the case of the German school, they made marked improvement in their school work.

Six months after Providence began work an open-air school for tubercular children was started in one of the Boston parks. There were forty-one children in that school, and after the first summer's work it was found that there were twenty-three cases where the disease was either arrested or entirely cured. These twenty-three children were sent back to the regular schools, and at last reports all but two of them were still enjoying good health. Five months later, in December of 1908, a new school was opened in New York. This latter instance is particularly interesting for two reasons; first, because the school was opened on an abandoned ferry-boat, which shows what good use may be made of apparently useless localities even in the most congested cities. The second interesting feature is that this school was opened on the petition of the children themselves. They were the patients from one of the hospitals who were convalescing and who were being given open-air treatment on the old ferry-boat. One day these children got together and organized a strike. They told the doctor in charge that they wanted to have a school. The Board of Education at once offered to furnish them a teacher and school material, and so the school was opened. Since that time three ferry-boats, a roof, and a number of rooms have been pressed into service.

In Chicago, work was begun in a camp during the summer of 1909 and since that time very notable progress has been made in that city both in

open-air schools and in cold-air rooms. These were the only schools in Chicago which had no Christmas vacation last winter. The children simply refused to take a vacation. They demanded that they be allowed to go to school, and the school authorities yielded to their demands.

The same story, with minor variations, was repeated in city after city across the country, and in every case the open-air school demonstrated its ability to take pale, wasted, and sickly children, and convert them into strong, vigorous, and healthy children. Because of these results, the open-air school has made an appeal to the popular imagination quite unequaled by that of any other educational innovation.

No single case of failure has yet been recorded and no city that has undertaken the work has subsequently abandoned it. Providence and two other cities began the work a little more than three years ago. During the following year, seven cities had open-air schools. Last year the number was fifteen, and this year it is thirty-two. Each year the increase has been over 100 per cent.

There is but scant time in which to treat the important problems of administration and cost. In most cases the open-air schools are administered by a partnership of responsibility. In the majority of the cities the cost for teachers' salaries, added equipment, etc., is met by the board of education, while the expense for food and clothing is defrayed by hospitals, charitable organizations, and societies for the prevention and cure of tuberculosis. Data as to the administration of forty-seven open-air schools in different American cities are as follows:

Board of education and tuberculosis association	20
Board of education and private association	11
Board of education only	7
Board of education and other city department	6
Tuberculosis association only	2
Board of education and private fund	1
	47

The premises occupied by the new schools are as varied as the form of administration. Among thirty-nine schools the following variations are found:

Remodeled rooms	14
Special buildings	6
Roofs	6
Regular classrooms with open windows	5
Boats	5
Tents	2
Barn	1
	39

The children received by the schools vary from those openly tuberculous to classes of entirely normal children in expensive and exclusive private schools.

The matter of cost is difficult to determine, for it depends almost entirely on local conditions. The only certainty is that the cost will always be greater than that of the ordinary class. To begin with, there are only about half as many children per teacher, the desirable limit being about twenty. In the second place, the expense for food must be met from some source. This expense amounts to about sixteen cents per child per day, and in some cases runs as high as twenty-five cents. In the third place, there is the individual equipment of each child, which is necessarily expensive. Its items, with their cost, are about as follows:

Blanket	$5.00
Eskimo suit	3.50
Sitting-out bag	3.00
Cot	1.75
Felt boots	.50
Mittens	.40
Thermometer	.25
Toothbrush	.20
	$14.60

This individual equipment is in the nature of permanent investment, and can be used, with slight repairs and replacement, for several years. Taking all of these different added expenses into account, it is fair to say that the education of a child in an open-air school costs nearly three times as much as does the education of the same child in the ordinary school. The other side of this proposition is that it is worth three times as much.

To summarize: The open-air school is a combination of sanatorium, playground, and schoolroom, in which the daily régime consists of double rations of air, double rations of food, and half-rations of work. There are eight requisites, of which the first three are imperatively essential. These three cardinal requisites are: first, abundance of pure air; second, plenty of good food; and third, sufficient warm clothing. The other requisites are only less important. We have enumerated three. Number four is shelter from the wind, for experience teaches nothing more clearly than that it is wind and not low temperature that causes suffering from cold. Number five is shelter or refuge where the children can be taken during very inclement weather, and where any child who gets chilly during the session may at once go to get warm. The sixth requisite is provision for sleeping after the noonday meal. For this purpose short folding cots are much more satisfactory than the steamer chairs ordinarily used. Number seven consists of the services of a skillful doctor and a competent nurse. These do not, of course, have to be in attendance continuously, but should be available. Last, but not least, it is essential to have in charge a teacher who is intelligent, able, and imbued with the habit of success.

These requisites are many, and they are essentially expensive in time, intelligence, energy, and money cost, and yet the real question is not

whether a city like San Francisco can afford to establish open-air schools, but rather whether it can afford not to establish them.

Figures for Germany, England, Sweden, and seven American cities indicate that in the average city the children in need of such treatment as that afforded by the open-air schools constitute about 3 per cent of the entire school membership. This means that San Francisco should have open-air schools for about sixteen hundred children. When such figures as these are mentioned, the objection of expense at once looms high, but it must not be forgotten when we are considering expense, that about ninety-five children of school age die each year of tuberculosis in San Francisco. On the average they have had about seven years of schooling for which the city has paid about $340 each. This means a loss of about thirty-two thousand dollars each year in this city in money expended in educating children who die of tuberculosis before they grow up. Thirty-two thousand dollars a year spent on open-air schools designed to prevent this frightful waste would go far toward meeting the entire expense.

But the matter of expense and preventable money loss are not the most important phases of the problem of the open-air school. Compute as we will, we can never arrive at an estimate in dollars and cents of the value of wrecked hopes and ruined homes.

I do not believe that the open-air school is to win its most notable victories merely as a factor in the fight against tuberculosis. Wonderful as its brief history has been, it is still one of promise rather than of fulfillment.

The open-air school will take its place in the history of education as marking one long step toward that school system of the future in which health will be contagious, instead of disease, and where pure air, pure water, and abundant sunshine will be rights, and not privileges. In that school of the future, the child will not have to be either truant or tuberculous or delinquent or defective to get the best and fullest measure of education.

DEPARTMENT OF PHYSICAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Clark W. Hetherington, Jos. Fels Endowment ..... Chicago, Ill.
Vice-President—Amy M. Homans, Wellesley College..... Wellesley, Mass.
Secretary—Clara G. Baer, Sophie Newcomb College..... New Orleans, La.

FIRST SESSION—Tuesday Forenoon, July 11, 1911

The department met in joint session with the Department of School Patrons in Scottish Rite Hall, San Francisco.

In the absence of President Hetherington, the meeting was called to order by Mrs. O. Shepard Barnum, president of the Department of School Patrons.

A report of the School Health Committee of the Department of School Patrons was read by Mrs. May L. Cheney, appointment secretary, University of California, Berkeley, Cal.

A report of the Public Health Education Committee of the American Medical Association was given by Eleanor Seymour, M.D., chairman for California, Los Angeles, Cal.

In the absence of Professor Tyler an address was given on "The Health of the Child the Joint Concern of Parent and Teacher," by W. A. Evans, M.D., former health commissioner, Chicago, Ill.

Then followed a paper on "Sex Hygiene," by Frances M. Greene, M.D., Cambridge, Mass. Discussion of this paper occupied the afternoon at the Round Table Conference of the Department of School Patrons.

The chairman appointed the following Committee on Nominations for the Department of School Patrons:

Arthur L. Hamilton, superintendent of schools, Pasadena, Cal.
Georgia L. Chamberlin, instructor, University of Chicago, Chicago, Ill.
Lucy E. Prichard, principal of high school, Huntington, W.Va.
Mrs. Clara M. Preston, State Normal School, Los Angeles, Cal.
Kate S. Kellogg, district superintendent of schools, Chicago, Ill.

Lucy E. Prichard, *Secretary pro tempore*

SECOND SESSION—Wednesday Forenoon, July 12, 1911

The meeting was called to order at 9:45 A.M. In the absence of the president and vice-president, Dr. William F. Snow, of the California State Board of Health, presided and gave a paper on "Teaching Twentieth Century Hygiene."

Dr. Corwin, of Pueblo, Colo., sent by the American Medical Association from the Los Angeles meeting in July, gave a discussion on hygiene and sanitation.

L. H. Weir, Pacific Coast field secretary of the Playground and Recreation Association of America, Seattle, Wash., gave an address on "The Playground Movement in America," which was discussed by Ethel Moore, president of the Playground Association of California, Oakland, Cal.

THIRD SESSION—Thursday Forenoon, July 13, 1911

This session was a joint meeting with the Department of Rural and Agricultural Education. The minutes will be found with that department.

FOURTH SESSION—FRIDAY FORENOON, JULY 14, 1911

In the absence of the president, the meeting was called to order at 10:00 A.M. by Mr. George Braden, who presided. The first part of the meeting was taken up with a discussion of the advisability of organizing a Pacific Coast association of physical education. It was finally decided to organize such a society, and Miss Signe E. Hagelthorn, director of physical education, Mills College, Cal., was elected president.

In the absence of John M. Tyler, professor of biology, Amherst College, Amherst, Mass., his paper on the "Physical Education for Girls of High-School Age—The Biological Point of View," was read by Miss Hagelthorn.

The paper was discussed by Clelia D. Mosher, director of physical education, Stanford University, Cal.; Everett C. Beach, M.D., director of physical training, public schools, Los Angeles, Cal.; George Braden, central Y.M.C.A., Philadelphia, Pa., and others.

The following officers were duly elected for the ensuing year:

President—WILBUR P. BOWEN, professor of physical education, State Normal School, Ypsilanti, Mich.

Vice-President—GEORGE E. JOHNSON, professor of play, University of Pittsburgh, Pittsburgh, Pa.

Secretary—BLANCHE TRILLING, associate director of physical training, Chicago Normal School, Chicago, Ill.

The meeting then adjourned.

SIGNE E. HAGELTHORN, *Acting Secretary*

PAPERS AND DISCUSSIONS

REPORT OF THE SCHOOL HEALTH COMMITTEE OF THE DEPARTMENT OF SCHOOL PATRONS, NATIONAL EDUCATION ASSOCIATION

To the Members of the Department of School Patrons of the National Education Association:

The School Health Committee of the Department of School Patrons was organized in response to a request from the President of the National Education Association "to ascertain conditions and formulate a plan whereby volunteer organizations can best assist in improving the health conditions of school children." The committee is too young to give a report of work accomplished; it can merely submit its plans and hopes for future service.

Believing that concentration of effort upon some one phase of the very large subject of school health would secure the best results, the committee decided to give its attention first to the teaching of the essentials of personal and sex hygiene in the normal schools and other institutions where teachers are prepared. It is unnecessary to mention here the considerations that led to the selection of this particular subject. The mere fact that many of the diseases that are undermining the physical and moral soundness of our men and women are too frequently the result of ignorance of the essentials of personal and sex hygiene justifies the selection.

In planning its work the committee had two purposes in view: First, to ascertain conditions; and second, to formulate a plan whereby volunteer organizations might best assist in improving those conditions. The first step toward this was a questionnaire sent to normal schools, education departments of universities and colleges, and state superintendents of public instruction.

In this way it was hoped to get information as to where and to what extent this subject is already being taught. The next work of the committee was suggesting plans by which these committees might co-operate with school and health authorities and social and educational organizations in arousing public interest. The suggestions, briefly summarized, are: Give the subject of personal and sex hygiene a place on the program of summer normals and teachers' institutes, in the study courses of all women's organizations, on the programs of their annual meetings; organize a social hygiene committee in each community with a representative from every club or organization interested in social or educational advancement; let this committee, in co-operation with school and city authorities, arrange for free public talks by speakers prepared to discuss the subject.

The committee hopes, thru the questionnaire referred to, to have ready for publication in the early fall a full report of what is now being done in normal schools toward instructing teachers in wise methods of presenting the essentials of personal and sex hygiene, with some suggestions that may be helpful in arousing the public to a realization of the need of such instruction.

The committee feels that it is encouraging to note in going over the answers already received to question No. 1 of the questionnaire—"Are the essentials of personal and sex hygiene taught in the school with which you are associated?"—that out of two hundred answers there are only twenty unqualified "No's." This means that a large percentage of the schools are making some effort to give this instruction, tho only a very few have specific courses. No state reported makes a knowledge of these essentials requisite to obtaining a teacher's certificate, tho Washington has begun to agitate the question. Very rarely is the subject given a place on the programs of teachers' institutes. A few women's clubs include it in their study course. Here again Washington seems to be the banner state, reporting that—"The Congress of Mothers includes sex hygiene on all programs." We hope for the coming year this may be true of all the organizations included in the Department of School Patrons.

The belief seems to be almost universal among educators that the young men and women of today should have more comprehensive instruction in schools in the physiology and hygiene of sex. The day of the expurgated physiology is passing. While this is true there is a great diversity of opinion as to how and to what extent the subject should be taught, especially in elementary and secondary schools. What is now being done is largely experimental.

The part of the joint state committee in this work will be to keep the subject before the people by talks and lectures and reading courses. Teachers should inform themselves and then educate the mothers. In Des Moines the president of the women's clubs in the city, with the superintendent of city schools, constituted a committee to arrange a mothers' meeting at each of the fifty-two schools, and advertised that a physician would speak to them on this subject. The possibilities of such co-operation are limitless. We especially urge that the joint committees try to have the subject given a place on the programs of the teachers' institutes, both county and city. In several states this has proven a most satisfactory means for interesting teachers and thru them the mothers, and here again we realize that the school of today is but a projection of the home, and that teachers and parents must work together for the good of the child.

The state committees are advised also to co-operate with the social hygiene societies that are now organized in almost every state. If possible, secure for your state a suitable set of slides for an illustrated talk on personal hygiene that may be used by schools and clubs.

While conditions in each state make it necessary that each joint committee shall have its own plans for getting results, yet all should have this common aim—to arouse public interest and to educate mothers and teachers that they may work together intelligently to eliminate from our social life the ugliness of sin and disease and the curse of ignorance.

Women's organizations interested in educational progress realize as never before that physical soundness is the basis of efficiency in men and women, and that the mere teaching of school textbooks on physiology and hygiene, from which facts most vital to our physical and moral life are carefully eliminated, is not sufficient to meet the needs of today. There must be something more direct, more practical, more appealing. What shall it be and how shall it be given? If it were the mere planting of new seed in fallow soil the problem would be easy, but too frequently the garden must be weeded first and cleared of things gross and rank in nature. Here is our most serious consideration, lest the stirring of the soil bring forth a more luxuriant growth of weeds.

Some interesting comments and suggestions have come to the committee. Many write, "I am fully in sympathy with the purpose; I am in doubt about the method." After an extensive study of the status of personal and sex hygiene in the normals, one president of a large university concludes: "We normals are asleep as far as hygiene is concerned." The professor of hygiene and physical education in another university suggests great caution in presenting the subject, and believes that the teaching should follow and be closely allied with general work in biology; while one of the most eminent educators of the time thinks: "The enthusiasts about raising the moral tone thru biology take too narrow a view of the subject." An eminent

physician thinks we are in danger of emphasizing too much the physiological side of the question and that the problem is largely a moral one.

The following from a normal-school president is notable:

> That a knowledge of the essentials of personal and sex hygiene be requisite to the obtaining of a teacher's certificate and an outline of minimum work on the subject required by the state, should be made obligatory upon our training schools, with special conditions as to the qualifications of the teachers or physicians who do the work—

and here, perhaps, is the logical beginning.

Respectfully submitted,

MAGGIE W. BARRY, *Chairman*

REPORT OF PUBLIC HEALTH EDUCATION COMMITTEE OF AMERICAN MEDICAL ASSOCIATION

The American Medical Association Committee for Public Health Education among women was appointed for the express purpose of meeting the ever-growing and popular demand for scientific instruction concerning the nature and prevention of disease.

Appreciating the efforts put forth by countless public-spirited women, who thru their various organizations have striven for improved conditions in home and community, and realizing what a power intelligent women exert in the molding of public sentiment, this committee from among the medical profession offers in a spirit of altruism to co-operate with them in this vital work of health education, the importance of which cannot be overestimated.

The psychological moment has come for such instruction, for the individual life has assumed an economic value, and health is now regarded as a national asset. The day of preventive medicine has arrived and our great national organization of physicians is delighted to recognize and encourage the arousing health conscience.

While the laity is beginning to have a permanent glimmering of health truths, many of the older generation have been anæsthetized by repeated monotonies and it is in the plastic, receptive minds of the coming generation that the seeds of hygiene will bear richest fruit. It is easy to start a child right. He accepts and assimilates new truths, and these, becoming a part of his composition, find practical expression in adult life.

To the grown-up the introduction of sanitary science seems an intrusion; it has survived primeval customs and conditions. Why disrupt them? The children are, therefore, the sanitarian's greatest asset and the improvement of their condition is the work of the century. This necessitates the education of their superiors in the science of right living, for in this movement for health conservation, parent, teacher, and child are vital and inseparable factors; while the sanitarian stands ready to lend advice or render active assistance wherever indicated.

To quote President David Starr Jordan:

If the great army of philanthropists ever exterminate sin and pestilence, if they ever work out our race's salvation, it will be because a little child has led them.

And Dr. I. N. Hurty, chairman of the Committee on Methods of Public Education in Hygiene, affirms that if hygiene be effectually taught in the public schools and if medical inspection of school children is in force, then within a decade public health exhibits and pamphlet distribution may largely be done away with.

In our United States there are always three million people sick and one million, five hundred thousand die annually. Heart and kidney diseases are steadily increasing, due to overwork of these organs, while as a most conservative estimate 75 per cent of our population is infected with venereal diseases. This amount of lost efficiency is matter for grave consideration.

The developing child is entitled to a knowledge of his anatomy and physiology, of the laws of health, and the results of their infraction. Education is the only means of eradicating the venereal peril, and as citizens we owe every boy and girl a knowledge concerning these diseases and their communicability. As 85 per cent of our children leave school before the fifteenth year, this instruction must be given early. The parent is the ideal source of this information, but the school teacher or physical director must be prepared to supplement the all too frequently faulty home training. It is here that the American Medical Association Health Committee can sometimes be of service in instructing both parents and children in sex hygiene.

A valuable bibliography on the prevention of disease, including the subject of social hygiene, has been compiled by the committee and these books and pamphlets should form an important part of every library.

During the year just closed the American Medical Association Health Committee, with its one thousand and eight hundred enlisted physicians, has given two thousand and eight hundred public lectures to audiences aggregating two hundred and thirty thousand, besides accomplishing much of a practical nature. For instance, it has been instrumental in securing medical inspection of schools, the introduction of bubble cups and individual towels, improved ventilating systems in cars, and the establishment of comfort stations.

In addition to the Central Committee of Ten appointed by the American Medical Association, there are forty-four state chairmen, also representatives in Panama, Alaska, and Hawaii. Their work in turn is divided among county chairmen.

For the convenience of those who may desire the co-operation of this committee in the arrangement of health programs, a list of the state chairmen is appended and also a list of suggestive topics in use by the committee.

Respectfully submitted,

ELEANOR SEYMOUR,
State Chairman, California

LIST OF SUGGESTIVE TOPICS FOR HEALTH LECTURES

1. The cause and prevention of common colds.
2. The air we breathe and the value of ventilation.
3. The prevention and cure of tuberculosis.
4. The importance of early diagnosis and treatment of adenoids.
5. The causes and prevention of deafness.
6. The value of pure food and the physiology of digestion.
7. The relation of wholesome food to good health, and the proper food for school children.
8. The relation of pure water to the public health.
9. Water-borne diseases.
10. The relation of flies, mosquitoes, and other insects to the public health.
11. Pure milk and infant hygiene.
12. The care of the food at home.
13. The use and abuse of stimulants.
14. The relation of teeth to good health.
15. The causes and results of eye strain.
16. The causes and prevention of blindness.
17. The prevention of acquired deformities.
18. The medical examination of school children.
19. The prevention of some of the commoner diseases (skin diseases).
20. The hygienic management of nervous children.
21. The causes and prevention of mental diseases.
22. The value of exercise and rest.
23. The responsibility of girlhood to motherhood.
24. The health of women in youth and maturity.
25. The importance of early diagnosis of cancer in women.
26. The relation of social diseases to the family.
27. The responsibility of boyhood to fatherhood.
28. How to instruct children regarding the origin of life.
29. The value of vaccination and serum therapy.
30. The value of animal experimentation.
31. The prevention of infectious diseases.
32. How to meet emergencies, hemorrhage, burns, etc.
33. Diseases induced by certain industries.
34. The causes and prevention of rheumatism, appendicitis, and Bright's disease.

CENTRAL COMMITTEE

Rosalie Slaughter Morton, M.D., Honorary Chairman, New York, N.Y.
Eleanora S. Everhard, M.D., Chairman, Dayton, Ohio.
Gertrude Felker, M.D., Secretary, Dayton, Ohio.
Alice L. Hamilton, M.D., Boston, Mass.
I. N. Hurty, M.D., Secretary, Indiana State Board of Health.
Oscar Dowling, M.D., Secretary, Louisiana State Board of Health.
Laura L. Liebhardt, M.D., Denver, Col.
W. F. Snow, M.D., Secretary, California State Board of Health.

STATE CHAIRMEN

Alabama—Dr. Anna May Robinson, 620 North Nineteenth Street, Birmingham.
Arizona—Dr. Agnes McKee Wallace, 137 East Goodwin Street, Prescott.
Arkansas—Dr. Nina Hardin, Fayetteville.
California—Dr. Eleanor Seymour, State Hygienic Laboratory, Berkeley.

Colorado—Dr. Alice Guthrie, 431 Temple Court Building, Denver.
Connecticut—Dr. Mary B. Moody, 154 East Grand Avenue, New Haven.
Dr. Kate Campbell Mead, assistant state chairman, Middletown.
District of Columbia—Dr. Frances Foye, 1118 Thirteenth Street N.W.
Florida—Dr. Ellen Lowell Stevens, 2050 Hill Street, Jacksonville.
Georgia—Dr. Frances Bradley, 706 Empire Building, Atlanta.
Idaho—Dr. Jessie Clark, 1211 Rigby Lane, Lewiston.
Illinois—Dr. Josephine Milligan, Jacksonville.
Indiana—Dr. I. N. Hurty, Indianapolis.
Iowa—Dr. Jennie McCowen, Davenport.
Kansas—Dr. Ida C. Barnes, 726 Kansas Avenue, Topeka.
Kentucky—Dr. Delia Caldwell, Paducah.
Louisiana—Dr. Oscar Dowling, Shreveport.
Maine—Dr. Lucinda B. Hatch, Spring and Emery Streets, Portland.
Maryland—Dr. Anna Schultze-Abercrombie, 827 Hamilton Terrace, Baltimore.
Massachusetts—Dr. Laura A. C. Hughes, 98 Huntington Avenue, Boston.
Dr. Evangeline W. Young, assistant state chairman, 131 Newbury Street, Boston.
Michigan—Dr. Della T. Pierce, Kalamazoo.
Minnesota—Dr. Laura A. Lane, 430 Mahoning Street, Hibbing.
Mississippi—Dr. Sara Allen Castle, 2008 Eleventh Street, Meridian.
Missouri—Dr. Dora Greene Wilson, Kansas City.
Nebraska—Dr. Marie L. Grote, Ponca.
Nevada—Dr. M. R. Walker, Reno.
New Jersey—Dr. Maria Mitchell Vinton, 15 Halstead Place, East Orange.
New Hampshire—Dr. Marion L. Bugbee, New Hampshire Memorial Hall, Concord.
New Mexico—Dr. Cecil W. Taylor-Goodman, New Armijo Block, Albuquerque.
New York—Dr. May Allen, state secretary, 297 Alexander Street, Rochester.
Dr. Anna White Marquis, assistant chairman, Norwich.
North Carolina—Dr. Delia G. Dixon-Carroll, Raleigh.
North Dakota—Dr. Elizabeth Rindlaub, Fargo.
Ohio—Dr. Eleanora S. Everhard, The Calvert, Dayton.
Oklahoma—Dr. Leila E. Andrews, Oklahoma City.
Oregon—Dr. Ethel Gray, Portland.
Pennsylvania—Dr. Elizabeth Leiper Martin, 329 South Dallas Avenue, Pittsburgh.
Rhode Island—Dr. G. L. Swartz, Providence.
South Carolina—Dr. L. Rosa H. Gantt, Spartanburg.
South Dakota—Dr. Annie B. Hainer, Sioux Falls.
Tennessee—Dr. Elizabeth C. Kane, 732 Exchange Building, Memphis.
Texas—Dr. Minnie C. Archer, Houston.
Utah—Dr. Belle A. Gemmell, Salt Lake City.
Vermont—Dr. Grace Sherwood, St. Albans.
Virginia—Dr. Emily C. Runyon, 1022 West Grace Street, Richmond.
West Virginia—Dr. Mary Virginia McCune, Martinsburg.
Washington—Dr. Marietta M. Armstrong, 520 Leary Building, Seattle.
Wisconsin—Dr. Sara Eliott, 506 Grand Avenue, Waukesha.
Wyoming—Dr. Letitia Wiseman, 4 Bank Block, Cheyenne.
Alaska—Dr. Beatrice Pearce Dickenson, Ketchikan.
Panama—Dr. Helen L. Doherty-McGillicuddy.
Hawaii—Dr. Minnette Burnham, Honolulu.

THE HEALTH OF THE CHILD THE JOINT CONCERN OF PARENT AND TEACHER

W. A. EVANS, M.D., PROFESSOR OF PREVENTIVE MEDICINE, NORTHWESTERN UNIVERSITY, EVANSTON, ILL., FORMERLY HEALTH COMMISSIONER OF CHICAGO, ILL.

This audience is composed of two portions—school teachers on the one hand and school patrons on the other. Between you responsibility is shared for the care of children during their most important years. A child goes into school with little memory and less judgment, with a small vocabulary and with less power of observation, with an untrained, unstored mind. In ten years, thru your joint care this mind is to be transformed. This function was primarily a family duty. Many years ago the state assumed its responsibility. The rights and obligations of the state in their legal and economic relations are almost universally accepted. That there is an implied partnership between teacher and parent to do this work is now widely tho not universally accepted. But the physical life of the child during those years is just as overshadowing as its mental life. By "overshadowing," I mean that when the child is growing from forty to one hundred and forty pounds and passing thru puberty, its physical being is more impressionable than at any other time in its life. The experiences of these years do not cause many deaths, but they determine the resistance and physical well-being of the person for many years after childhood has ended, and in some phases until the end of life.

In fact, the child is not one. It is three in one—a physical, a mental, and a moral life—each separate, yet each so interwoven with the other that any impression made on any one is felt by each of the others. These phases of life are just dawning on our consciousness. Some parents are seeing it, some teachers are seeing it, and a few governments are seeing it. What we want is that teacher and parent may understand their joint responsibility in this field. I am sure that you teachers have often seen pupils who were not learning and who were not in good physical condition, where you felt certain that you could work it out satisfactorily if you could have an understanding with the parents. I am sure that you parents have known of children whose home influences made for a good physique, a good physical brain as a basis for an alert, sane, psychic mind, yet who were not thriving mentally or physically. You have concluded that the schoolroom was too hot, too dry, or too foul, or the pupils carried too much infection—acute infection, subinfection, or latent infection.

So you have drifted on.

May we not then spend this hour in talking together about those physical influences which exist in schoolrooms sometimes—the responsibility for which lies sometimes with the teacher and sometimes with the parent?

I think school children are more frequently harmed by bad air in the schoolrooms than by any other cause.

We believe more in the spread of infection by contact than by air conveyance. This is certainly true of diphtheria and typhoid. It is probably true of measles and scarlet fever. But an infection with colds, pneumonia, tuberculosis, infantile paralysis, cerebrospinal meningitis, and smallpox is to be reckoned with. Yet bad air as a contributing cause of infections is more important than its capacity as a physical transporter of disease germs.

Schoolroom air is usually too dry. It dries out the nose and pharynx, and disease germs, which should easily have been thrown off, get into the tissues and blood and cause infections. Schoolroom air should have the same relative humidity as outside air. It should never be more than thirty degrees less. It is usually sixty degrees less. When there is an outside humidity of eighty-five, the usual schoolroom humidity is twenty-five. Humidity can be measured with a hygrometer, a wet-and-dry-bulb thermometer, or with accuracy by simpler instruments. On a very cold day the radiation must heat the outside walls and windows must be double, else sweating and frosting will be considerable when the relative humidity passes fifty. That is one of the objections to hot-air heating. It is not possible to concentrate the heat at the outside walls, about the only place where it is needed in a large school building several stories in height. As between low humidity and sweating walls and frosting windows my advice to you is always to put up with the latter. The humidity can be raised by jets of steam playing into the incoming air, by some patent humidifiers, by fountains and sprays of water, by exposed water on radiators, stoves, etc.

Whenever the humidity rises over fifty the temperature of the room can be lowered. When the humidity is low the perspiration and lung moisture evaporate so rapidly that the pupil gets cold if the temperature is not fairly high. Therefore, humidity and temperature go hand in hand. A child living several hours in a temperature which is too high wilts mentally and physically. This repeated day after day takes the bloom from the cheek, the sparkle from the eye, and acting in unison with a humidity which is too low is responsible for the glands of the neck, adenoids, and enlarged tonsils. The school temperature should not pass sixty-eight degrees Fahrenheit. A few years from now we will be able to fix sixty degrees Fahrenheit, a better figure, but inadvisable now. By sixty-eight degrees Fahrenheit I mean this should be the general temperature of the lower five feet of air in the schoolroom.

Someone, the teacher or some pupil, should keep an hourly written record of the temperature and humidity of the schoolroom. The methods of heating and ventilating schoolrooms is meat for a full discussion and I cannot enter into it here. But you school teachers can refuse to teach in rooms over sixty-eight degrees Fahrenheit, and you school patrons can refuse to allow your children to go to school in a room which is over sixty-eight degrees Fahrenheit, and the battle is won. Technically you may be

transcending your rights, but the basic good will be so overwhelmingly on your side that you will get your point, and that is what counts. Any occupied room should be blown out several times a day. When the pupils go out for recess or lunch, throw the windows wide open and freshen the air in the rooms. The temperature should drop well below sixty degrees Fahrenheit. It should be fifty-five to sixty degrees when the pupils come in from play. They have been running and exercising vigorously; therefore they are making and have just made a lot of heat which must be radiated. If they come into a temperature of sixty-eight they are liable to catch cold or some other kind of infection. If air is right as to temperature and humidity the two main points are covered. There should be a good deal of air movement in the room. Whenever the air in an inclosure has a more-like stillness it is either unhealthy or easily made so; sometimes electric fans are available. These are very comfortable in the summer time; they are great aids to good air conditions in the winter time. I should say that they are more needed in the winter than in the summer. If fans are not available, then a window raised a few inches from the bottom and provided with a deflector does quite well.

The air must be clean, and that means that the floors must be kept clean. To train the pupils to clean their feet as they enter the building is of immense service. The blackboard dust can be held down by using an eraser which has been slightly moistened. A piece of cheesecloth fastened over the eraser can be kept just damp enough and not too wet.

Most of the ills of children in school years are communicable. It is said that no man can live his life alone—that every act of every man in some way influences every other man. In childhood lives touch at even more points than in adult life, and in addition the plasm is softer and every point of contact becomes a facet.

Teachers might say that if parents did their duty children with measles, diphtheria, scarlet fever, colds, and other forms of contagion would not come to the schoolroom. Parents might say that if teachers were sufficiently alert their children would not be thrown in contact with infected children. Each of you is right—each of you is wrong. There are cases of diphtheria infection which show the appearance of diphtheria so that no one can mistake them. But in addition there are subinfections and latent infections with diphtheria bacilli. Subinfections are sore throats due to diphtheria bacillus—sore throats looking very much like the ordinary sore throats. Latent infections are throats containing diphtheria bacilli, which throats look almost normal. Other names for these conditions are atypical cases and carriers. In the present state of our knowledge teacher cannot blame parent—parent cannot blame teacher. Nor does diphtheria stand alone in this particular. It is just as true of scarlet fever, measles, infantile paralysis, and meningitis. Maybe it is also true of consumption, pneumonia, and colds.

I have no intention of absolving either of you from responsibility. No child having an open infection should be allowed in a closed room with other children. By "open infection" is meant any infection which is giving off bacteria into the sputum or mouth or nose secretions.

You will notice the stress which is put on the orifices in the face—particularly the mouth and nose. If parents and teachers will watch these closely enough to see that they are always clean and free from infecting secretion they can be excused for overlooking almost anything else.

Measles, scarlet fever, diphtheria, meningitis, and infantile paralysis always start as a throat or nose infection; therefore every sore throat should be regarded as contagious until it is proven otherwise. The burden of proof should be on the defense.

I wish I felt that the time was ripe to pursue the same policy with all colds, particularly those with some fevers and aches. Such colds are just as catching as diphtheria. But if we were to exclude colds from the schoolrooms, the teachers would teach very small and select classes at times. When bedrooms, playrooms, and schools are properly ventilated we will be able to exclude colds from the schoolroom and good health and good scholarship will move up several pegs.

But be as careful as you may, some infectors will get into the schoolroom. Remember that people more than things spread contagion. Then pupils must not exchange pencils—slate pencils must be kept in an antiseptic fluid, a 3 per cent carbolic solution. Mouths must be kept away from common drinking-cups; handkerchiefs or other cloths must be used to cover the face in sneezing and coughing.

There should be medical examination of the children. No other course is fair to the teacher or to the children in the room. Medical inspection in the long run operates to increase the attendance rather than diminish it. If taking out one pupil operates to prevent contagion which would result in taking out three pupils, there is a net gain of two pupils. Exclusion by medical examination averages a few days in duration. Exclusion by reason of confining sickness averages several times as long. Occasionally we read that the schools of a certain town have closed down because of an epidemic in the town. This is always in the towns without school inspection. It never occurs in towns with school inspection. Aside from the lack of necessity it is bad judgment—contagion can be controlled better when the children of a town meet daily at school under observation than it can be where they are meeting promiscuously on the streets.

There should always be physical examination of the school children. Children in bad physical condition cannot study well. Many of them fail to make grade. Others hold their grades back so that the average amount of ground covered is not what it should be. It is expensive for the school, for other children in the school, for the laggards themselves. It is not fair to anybody.

The most frequent defect found is bad teeth. Teeth are bad because they are dirty or decayed. Then come adenoids and tonsils giving mouth breathing. Now kernels are found in the neck. The expression of the face changes. The child becomes pale, flabby, sickly, and is a "catcher." The mother thinks luck's against her. Her children are always catching something. They have become catchers thru some physical neglect. It isn't fair to the teacher to ask her to worry her life away trying to teach children of this type. Try as hard as she can she can only make a half-way job out of it. She loses her pedagogic pride in the product.

But then, if the teacher knows what is really and fundamentally the matter with the child, should she not tell the mother and father? But she does and they do not heed. Here, as a supplementer of the teacher, is one of the important duties of the school nurse.

It may be argued that all of this is an invasion of parental rights—a child with contagion coming in contact with another child invades parental rights—a physically neglected child determining the rate of progress of another child, taking from that other child some part of its portion of the teacher's time, energy, and thought, invades another child's parental rights. Shall there be the right of invasion for harm without the right of invasion for cure?

Has not compulsory education fixed the right of good to rout evil regardless of small concepts of liberty? Are these aspects of education less important than attendance—the aspect whose standing in law and procedure has been definitely fixed? If it is right, should not teachers and parents put it into practice wherever they can, and besides work for a supporting public sentiment? To this end the schools, the schoolrooms, the school teachers, the pupils, and the patrons should be used first to determine position and then to popularize information. Councils between teachers and parents individually and in groups can be of great service, as well as popular education on the harm of hot schoolrooms, of dry air, of still air, of dirty air, of uncontrolled contagion, of practices which spread contagion, of the evil of neglected physical defects. Popular education on such subjects can best come thru the joint efforts of school patrons and school teachers, and nothing which you can do will be a greater community service.

SEX HYGIENE

FRANCES M. GREENE, M.D., CAMBRIDGE, MASS.

Two years ago a physician in California wrote a physiology and ventured to insert a chapter on "Reproduction." His publisher refused to print that chapter. Today the question of sex education and sex hygiene is occupying the attention of the entire country. We have been caught in a wave of the movement which is destined to revolutionize the social

world and base man's future happiness upon the solid foundation of knowledge, purity, and a perfect understanding between the sexes.

It is to the credit of the medical profession that the initiative in this great work was taken by them. For the last decade the greatest scientific minds have occupied themselves with an ever-growing evil—the spread of venereal disease.

With the discovery of the germ of the gonoccorus infection it was found that the untold sufferings of enormous numbers of innocent women could be traced to that cause. The discovery of the germ of syphilis has led to the inclusion in its deadly work of many serious conditions, previously attributed to other causes. An ever-increasing number of the victims of the one or the other of these infectious diseases fill the institutions for the blind and for feeble-minded children. The loss to the population of countries thru the sterility caused by both gonoccorus infection and syphilis mounts into astonishing figures.

Great medical specialists felt that the responsibility was too heavy for them to bear and that the secrecy which had so long obtained in these matters was no longer tenable. Imbued with the spirit of an era the watchword of which is "prevention," these men realized that a condition, the roots of which are imbedded in social ideas and social customs, could not be overcome by medical science alone.

When the great International Congresses for the purpose of investigating this evil met in Brussels in 1899 and 1903 their members were composed not only of medical men but also of educators, jurists, clergymen, writers, statesmen, and economists. They found that, allowing for the difference of race, temperament, and economic conditions, all countries were suffering from the same evil. Prompt action was urgently necessary. In their sincere and earnest search for a solution, every side of the question was studied, but it was felt that the root of the matter had not been touched until the conclusion was advanced that if the world wanted a radical change, a firm foundation upon which to build a society of individuals endowed with moral and physical strength, the work must begin with the infant. Then the cry went up that found its echo on all sides, the call upon one without whom this change could not be wrought—the mother. The bearer of the child stands closest to it. She is therefore the most fitting instrument to begin this regeneration of mankind. Parents should be taught the dangers and their dire consequences which may assail their sons and daughters. The children who are going out into the world must be sent out prepared for the struggle and impressed with their individual and moral responsibility. Our babies should be born into an atmosphere of truth and knowledge unashamed. In a word, it was hoped that the sex education of the parents would give them the courage of conviction so that the first steps might be taken in the home.

In Europe, family-life retains a certain patriarchal quality. There is

still that strong tradition, that instinct of the clan which recognizes the wise head and resort of last appeal, the tender home-maker—the community of interest and the indissoluble bond of the single purpose. The son more often than not continues the work of the father. The destinies of children are usually arranged at their birth. Where there is a break in the tradition of a family it is of a violent character and takes the form of an extreme reaction. But the parent once convinced of his duty as regards a new note in education, a new point of view, finds it not difficult to charge the home atmosphere with the new idea. He has, moreover, the comfortable assurance that the schools are prepared to support and further the development of any ideal which means the betterment of the race.

In our more complex civilization, family relations are not so easily defined. The keynote of the American family is the absence of tradition. The intelligent American father of today knows that if he does not make a friend of his boy, it is a mere matter of time when he shall lose him. The mother is, as a rule, entirely resigned to the fact that from the age of puberty her sons and daughters drift from her. The incompatibility is not one of years. The parents drop out of the child's life because they do not fit into it. The constant flux in American life is reflected in the family. Nowhere can it be so truly said that if our mothers begin our education our children complete it. The tradition upon which the parents' lives were formed do not exist for their children and the parents give them nothing to take its place. The earliest questionings which might lead to the most real and sweetest of intimacies are met by deceit, falsehood, coldness, or abuse. The first link in the chain of misunderstanding is forged. The very strength of youth which today finds its expression in so-called independence and arrogance, rightly developed, might express itself in reverence and effort for the mother who has not severed the spiritual bond between them by being ashamed of having given him birth, but who could tell him with simple earnestness something of her inner life at that supreme moment. Instead of this, only too often is the child thrown upon himself. He misses the training and restraint which parental and family tradition would impose upon his early years. He develops an independence which would be the crowning glory of our country were it not for one thing: freedom, in the sense which our youth understand it, means the will to have—not the will to do without, or self-control.

The ever-increasing mass of foreigners, in their delight at becoming a part of this great republic, cast from them every tradition of the mother-country. In this wonderful land they think all are free and equal. The government will take the children into its care and deliver them back educated men and women—American citizens. We have helped them to forget their traditions but we are to give them something greater—ideals.

The work on this problem is infinitely difficult. It *should* begin with the mother; but are all mothers, even tho they feel the force and truth of

the appeal, capable of at once overcoming the false position of so many decades? Many of them bring to the civilization of the twentieth century an ignorance of the machinery of life outside the actual family circle and the mistaken modesty of women whose lives have always been sheltered. They cannot therefore understand the rude shocks which await their sons and daughters and the helplessness of these mentally, morally, and physically unprepared children in the face of temptation.

There are as many varieties of mothers as there are children, but the mother for whom this is most difficult is the one who, convinced of the neglect of her duty, attempts to re-establish confidential relations with her growing girls and is met with a distinct rebuff. It is a very common occurrence. The confidence on these subjects has been placed elsewhere: mother is out of it.

The children of today are destined to be the units of a society whose point of view is to make it unique in the world's history. It will be characterized by a single standard of morality for both sexes. To achieve this result parents must be taught that sexual intercourse before marriage is not necessary to health. The child must be so trained and educated that it will later be possible and natural for him to live up to the high standard which the women of his age (who will not wait at home for his coming but march thru life at his side) shall demand of him. The ideas of society must be changed into ideals that young men may not be weakened and corrupted by the passive acceptance of false standards of morality.

One of the most important factors for the attainment of this end is the same education of both girls and boys in matters of sex, from which all secrecy, except that which is necessary for true modesty and refinement, shall have disappeared. The schools must carry on the work; an enlightened society complete it. Information, however, is not education. The children should be provided with an environment not only favorable to the development of ideals of moral and physical cleanliness, but also calculated to awaken in them a moral responsibility and to develop the self-control necessary to maintain those ideals. Nothing is truer than that "a character is a completely fashioned will." If we could but teach our children that the most completely fashioned will is the will to do without!

The school physician is fast becoming a recognized necessity. Much is being done to change physical conditions in the homes. Parents are being taught that proper food, cleanliness, fresh air, are necessary to the normal development of the child. Playgrounds are multiplying in order to fill his leisure with healthful, clean exercise. But when we have brought into the blood of the child the substances necessary to build up his body to a certain norm, when so much has been done to make the child realize that honor and truth are actual, tangible, workable, even profitable elements in life, we still have the most important, fundamental side of his development untouched. We cultivate and satisfy only that side of his healthy

curiosity which agrees with our preconceived ideas of what he ought to know, and allow that interest which would naturally be first aroused about himself and his kind to develop under the unfavorable conditions of secrecy, deceit, and neglect. Being obliged to get his information at second hand, thru half-truths, from evil-minded sources, he will still feel that there is more to know, that the mystery is not yet solved and will be led still farther, the result often being a mental degradation and unchastity with frequent serious physical results.

It is to meet this evil that biology should be taught in the schools; not in fragments, but as a complete system of development from the lowest forms of life to the highest. To the child, reproduction in the human should be the last link in the whole chain of natural phenomena, instead of something quite apart from the natural order of things, which will inevitably arouse his curiosity, which is kept in secrecy and mystery, and branded with the stigma of unclean.

It would be unfair to impose upon the already overburdened teacher another special scientific branch of study. The actual teaching should be done by those trained for this purpose. There are now in the University of California several young men and women in the scientific and premedical department whose profession it will be to teach biology and sex hygiene. At present the school physician is to be relied upon, but it would be wiser were his office confined to the practical consideration of the physical health of the children. Nor less in importance will be his office of informing all children who are leaving school for the world of work, or who have reached the age of self-assertion (very early in this country), of the physical dangers and their consequences which await the weak and willful.

The doctor, however, is, even in the child's mind, still too closely associated with the pathological. To the growing child the presentation of biology and reproduction should appeal as a normal and beautiful process. It ought to be so stirring and uplifting that the child will feel a pride in his human superiority. Once the habit of thought is established that development is the keynote of all creation, once he is made to feel that his high position in the scale of existence entails a certain *noblesse oblige*, gives to him privileges but demands of him duties, it is not difficult to imagine how moral responsibility may be awakened and how profoundly ethical such a training could be made.

Altho the actual teaching is the specialist's work it will fail of its highest purpose if we do not provide an atmosphere in the school to counteract the only too frequently unfavorable home and outside influences. For this we depend upon the teacher, who must have sufficiently studied and felt into the subject to have a broad, sane point of view, a sympathy not only with externals but with deeper impulses. This sympathy is an essence which children quickly recognize and which would draw many a child to the teacher in its hour of psychological need, thus making her fit

to be a savior of children's souls as well as bodies. We cannot educate this fine essence of sympathy into people, but it is the glory of womanhood to possess it naturally in large measure, and are not nearly all our teachers women? Therefore the first absolute essential is that teachers and mothers be trained in all matters pertaining to sex hygiene and sex education. They will learn to look upon sexual questions not as unclean and impure, to be enveloped in mystery and spoken of with embarrassment. They will realize that human life and happiness is based upon the proper comprehension of such questions and that untold misery has been caused by their misunderstanding and neglect.

It has been no rare occurrence for pioneer workers in this movement to discover in college professors, clergymen, and other men and women holding positions of great responsibility in the training of our youth, an ignorance or false conception of the essential questions of sex equaled only by that of the street Arab who, after all, has the advantage of a certain rough knowledge lent him by the exigencies of his unprotected life. One and all, high and low, have been lulled into a mental and moral lethargy by that master-slave, Habit.

We are born with certain tendencies, but our training and environment are responsible for their development and fixation. Every act, every thought of our daily life is a habit, the result of repetition. Our religions, our morals, our immoralities, our loves, and our hates are habits. Let an action or thought be never so deliberate, its constant repetition will make it involuntary. Be the action, the thought, good or bad, if the soul sleeps, the response is equally prompt. But if the soul awakes in time before our habits are crystallized, we may overcome them, and form new channels of thought and action. The power is given us to decide. Shall we be masters or slaves?

This psychological fact is of the greatest significance in training the young. The habit of thinking pure and clean thoughts is one of the most important assets of a child's education. When we can combine habits of clean thought and reverence with self-control we may send the child into the world assured that the high ideals of his time are safe in his keeping.

A psychologist has said,

> The sounds of a violin improve by use in the hands of an able artist, because the fibers of wood at last contract habits of vibration conformed with harmonious relations. This is what gives such inestimable value to the instruments that have belonged to great masters.

The souls of children are like violins and will respond to the touch of the teachers who play upon them. It should surely be one of the most inspiring aims of the future fitly to train such teachers. In their hands we may safely place our children, but let us not forget that the influence of the home precedes that of the school. Let us ever remember that we,

each and all, form part of a society which is to receive these children from the hands of the teachers. May they find us striving for those ideals which perhaps it will be their privilege to attain.

DISCUSSION

ROMILDA PARONI, M.D., lecturer in hygiene, University of California, Berkeley, Cal.—In rising to discuss the subject of sex hygiene, I want first of all to express my deep appreciation of Dr. Greene's thoro and illuminating paper, which expresses so clearly, especially to Californians, her earnest, self-sacrificing devotion to the interests of the problems of sex hygiene.

For several years I have been deeply interested in this subject. My interest has naturally grown with my recent opportunities—the physical examination of delinquent girls of the Detention Home of Alameda County and the physical examination of five hundred girls in the Berkeley High School during this last year.

No one can have had much to do with young men and young women without abundant experiences with the tragedies of life due largely to ignorance along lines of hygiene, especially sex hygiene. It is safe to say that many of the habits which result in physical, mental, and moral disease are due to ignorance along these lines. The need of plain speaking has repeatedly been brought home to me in connection with my examination of the delinquent girls of the Detention Home of Alameda County. What strikes one in dealing with juvenile delinquents is the appalling amount of sexual wrong-doing among very young girls and boys—many of grammar-school age and from intelligent families.

Judging from the inquiry of many children, we must conclude either that parents are grossly ignorant of the facts of sex or that they misjudge the time of life when such instruction must be given. Simple questions require simple but truthful answers.

Every parent and teacher may take it as an absolute fact that nine-tenths of school boys and girls, both in the city and country, whether in public or private schools, are normally extremely curious regarding matters of sex, and learn much of matters of sex and reproduction as early as eight and ten years, and where not so carefully guarded, as early as six.

I wish here to emphasize the point made by Dr. Greene that the perfectly normal sex instinct and curiosity should be respected and diverted into natural channels by teaching biology in schools. With Dean Sumner I take decided issue that we should delay teaching of sex hygiene until adolescence. That method of delay has proved a failure. We are trying to do preventive work. As Professor Rugh of the University of California has said:

> The prevention of syphilis and gonorrhoea is but a part of the larger problem of sex hygiene—and sex hygiene is but part of the still larger problem of individual health, purity, and efficiency.

It is clearly the duty of education, both at home and in the school, to keep children not ignorant, and too often impure as a result, but to keep them pure by giving the right knowledge and demanding of them right action by the exercise of "the will to do without, or self-control."

Most teachers and parents unfortunately are fit neither in knowledge nor in courage, as has been said, to give information in sex hygiene. There are also fathers and mothers who resent the intimation that their children are in need of protection against moral or physical disease. For children who have no mother or father, or whose parents do not do their duty or do not have the necessary knowledge, I hold sex education should be taught in school as a part of a general course in biology.

Instruction can best begin by observing the analogy of plant and animal life and should begin early in the child's life, at home thru the mother, at school thru teachers especially trained in biology.

Boys and girls of the "self-asserting age" should be taught their sex anatomy and physiology by the aid of specimens, models, and diagrams. They should be taught respect for the dignity and sacredness of marriage, their responsibility to future generations. The false, antiquated impression instilled in the minds of many young men that sex indulgence is essential to health, and that continence leads to loss of vigor of mind and body, must be corrected. Without too many particulars, when discussing diseases in general and in particular, venereal diseases and their serious results and effects on public health and family-life should be discussed.

I wish to emphasize strongly the need of making sex education a natural part of a general course in hygiene and not detached and isolated to give it mystery. This has been the plan I have attempted to carry out this last year in a series of twelve half-hour talks on hygiene, personal, sex, and public, before about seventy-five senior girls in the Berkeley High School. Mothers, teachers, or anyone interested were invited to be present. This opened up a way for freer discussion between mother and daughter at home.

For girls I believe the instruction, especially in sex hygiene, should preferably be given by a woman physician who has the respect and confidence of the young women.

Dr. Greene has emphasized the fact that this is a problem for the physician to initiate, but because it is so firmly grounded in social life it needs the interest and work of every member of society to eradicate an evil so deeply rooted. It is the duty of every good man amd woman in this world to do all in his or her power to stamp out the double standard of morality.

Charles E. Rugh, associate professor of education, University of California, Berkeley, Cal.—The paper of Dr. Greene is a real and timely contribution toward a solution of this pressing problem. To right-thinking people, whether we teach sex hygiene is no longer a problem. To thoughtful people, whether the school shall teach sex hygiene is no longer debatable. These questions are settled. The school must do it as a part of the greater movement for individual and national efficiency.

When? Who? What? How? are problems.

One thing is absolutely certain: each normal child will have sex knowledge. Innocence is impossible. The alternatives are not innocence or impurity; they are pure or impure sex-life: or better, the alternatives are scientific intelligence or ignorant vulgarity.

Two irresistible processes produce sex knowledge and sex action: first, the growth and development of the sex organs along with the corresponding instincts and impulses simply force sex problems into consciousness; second, the present social order furnishes abundant stimuli and occasions for the development of these instincts. The natural and normal instincts may lead to abnormal conditions, but their suggestions and development are just natural—neither pure nor impure. The source of both physical and immoral contagion is society.

Our hope lies in the fact that the child as a growing organism is just as susceptible to good influences as it is to bad ones. Children are ready and anxious to be inoculated with the germs of knowledge and action, and if children continue to be inoculated with vulgar vocabularies and impure practices and the germs of venereal diseases, it will be because parents and teachers fail to inoculate them with pure language and right habits. Almost all opposition to the teaching of sex hygiene comes from persons thinking of their own knowledge and action in these matters; and be it said to our shame that common knowledge and common practice about sex-life are not fit material to be taught to anybody. Under present social conditions most teachers, and, be it said again to our shame, most parents, are neither fit in knowledge or courage to give instruction in sex hygiene. But there is coming to be an increasing number of teachers and physicians not only fit but specially qualified to give positive instruction in general hygiene and then in sex hygiene as a special phase of the work.

When sex hygiene shall be taught almost answers itself. If boys and girls are to get

pure scientific sex knowledge from teachers they must get it before the other boys and girls give them impure and vulgar information. A local physician put this forcibly by relating his own experience. He undertook to instruct his twelve-year-old boy and learned that the boy could tell him things. He then started in on the nine-year-old and said, "I could tell him nothing." The physician said with an oath that the intended to save the youngest who is four and one-half years old, and so he had begun on him.

The educational problem in the present social order is not how to keep children innocent but is how to keep them pure in heart. This can only be accomplished by thorogoing intelligence and continued right action. Tennyson gave the keynote to personal efficiency in the lines,

My strength is as the strength of ten
Because my heart is pure.

The educational means for realizing this aim are such social conditions as insure that each child gets its knowledge of sex matters from intelligent, pure-minded persons, instead of from the ignorant and careless or, still worse, from the vicious. Said John Wanamaker, "Reform a man and you reform one. Reform a boy and you reform a whole multiplication table." Horace Mann had the same principle in mind when he said that "Where life is involved one former is worth a thousand reformers."

THE PLAYGROUND MOVEMENT IN AMERICA

L. H. WEIR, FIELD SECRETARY, PLAYGROUND ASSOCIATION OF AMERICA, SEATTLE, WASH.

The playground movement had its origin in the various social, educational, economic, and civic problems growing out of the change from country to urban life; in an awakened conscience relative to the welfare of children; and in a keener, more intelligent, and sympathetic appreciation of young life, if that life were to be healthy, vigorous, and happy.

Historically the movement began in Boston about 1882, and was concerned only with the needs and pleasures of little children. During the years intervening between that date and the last years of the last century the movement lay dormant. This was a period of tremendous city and town growth, of a wonderful increase in the intricacies and complexities of social, industrial, educational, and civic problems. One great fact among many others borne up from the depths of the turmoil of conflicting forces of that time was that the children and the young people were finding themselves hard put to it to survive. The abnormal conditions of almost instantaneous city growth had come upon them unawares. They cried out for bread but were given stones. Industrial conditions made heavier and heavier demands upon them; schools increased their curricula; homes were no longer homes in the old sense; living quarters became more and more compact, and ofttimes unwholesome; ordinances and laws restricted their liberties within narrower and narrower bounds; in short, it seemed that urban communities had deliberately determined upon a policy of ignoring the rights and needs of their future citizens. No age has, however, been without its visionaries, who saw the light and led the way; so, luckily, there were men and women, especially women, who saw and understood

and acted. The year that saw the inauguration of a complete revolution (juvenile courts) in the legal-social treatment of the unfortunate children saw also the beginning in the same city, Chicago, of the recognition on the part of the community that it was as important to provide for the play needs of the children and young people and for the recreational needs of all the people as it was to have efficient departments of public service, and far more important than to have efficient departments of public safety; for the safety of the people lies not in repression of the wrong-doer or in curing the maimed, the halt, the blind, but in preventing him from ever becoming a wrong-doer, or from ever becoming diseased and inefficient, by giving him more of a chance of being a healthy, vigorous, and happy-minded citizen. The scheme of playgrounds, athletic fields, parks, and recreation centers of Chicago, especially that of South Park, has set the type for the whole country and from that year (1898) the movement has progressed with such leaps and bounds that no other national movement has ever paralleled it.

Space and time prohibit a full statement of the material progress of the playground movement, but the few following statistics will indicate clearly the marvelous growth. Before 1906 there were but 41 communities that had supervised playgrounds; there were but 8 playground associations, and no state had playground legislation. The number of cities maintaining playgrounds grew from 90 in 1907 to 177 in 1908, to 336 in 1909, and in June, 1910, 195 cities were conducting playground campaigns. Most of the playgrounds in the early days were started under private auspices. Last year in about half of the cities maintaining playgrounds the play centers were, at least in part, under municipal management. Ninety cities have organized playground associations, 26 cities have established playground or recreation commissions. During the year ending November, 1910, 184 cities, maintaining playgrounds, from whom reports were received, maintained 1,244 playgrounds, employed 3,345 workers, and expended $3,025,779. Thirty-two cities alone employed 643 workers thruout the year. Thirty-one cities reported that their schoolhouses were used as recreation centers. New Jersey, Massachusetts, Virginia, Ohio, and Washington have enacted playground laws. There is pending now before the state legislature of Pennsylvania a bill providing for the creation of recreation departments in all cities of the first class and the New York legislature has recently passed such a law providing for the creation of a recreation commission for the city of New York. Columbus, Ohio, has already such a commission created by ordinance, St. Louis also, while Boston is working upon the same plan. Within the last decade there has been expended by the various municipalities and towns of this country alone in extending this work, over $60,000,000.

Thinking people all over the United States have come to realize the importance of making some provision not only for the play of the children, but also for the recreation of the entire community. They realize that in

this way they are making workers more efficient, so that factory work and other industrial work in our modern society will be better done because the workers will be more alive and better fitted for their tasks. They realize that the scientific study made of juvenile delinquency in Chicago has shown that recreation centers are one of the most powerful agents for reducing juvenile crime thru giving an outlet for juvenile energy. They realize that there is no more effective means for fighting tuberculosis than by providing means for outdoor recreation, so that people shall spend their leisure hours in happy, vigorous exercise out of doors. They realize that thru festivals and thru the other meetings in recreation centers by which neighborhoods and communities are brought together, a community spirit is developed which insures better citizenship. Those who are interested in the assimilation of the immigrants coming to our cities are anxious for recreation centers where the newly arrived citizens may more quickly come into contact with American life and learn American traditions. They call our modern recreation centers the melting-pot of our civilization. Many of those who wish to destroy the white-slave traffic feel that as fundamentally constructive work as any which they can do is that of providing recreation centers where the young women of the country may obtain under normal conditions the highest ideals and at the same time find happiness and satisfy the spirit of youth which is the sign of life itself.

But it is not for all these reasons that the great majority of the people of the country are today ready to spend their time and give their money to the recreation movement. It is because they realize that life is worth living for its own sake and that anything which gives the people the capacity for greater enjoyment, which enables them to live more keenly while they do live, is doing just as much for society as any discovery which lengthens the period of life itself. Altho in the beginning playgrounds were generally originated and managed under private auspices, and this still remains true in a large percentage of communities today; nevertheless the importance of the movement is such that it is a settled principle today that the organization, management, and maintenance of playgrounds and other forms of recreation shall be under some regularly organized municipal (using the term "municipal" in a broad sense) authority and that the work should be supported by public funds.

The second principle is that there shall be provision made for all-year-round activity, otherwise it will be impossible to secure and keep a corps of efficient, well-trained leaders and directors. This all-year-round work can be developed thru use of school buildings for evening recreation purposes; thru the construction of municipal recreation buildings; thru the use of other public buildings; or thru utilizing all these agencies, as is the case in Columbus, Ohio. The most economical, and perhaps the most effective, way is to utilize school buildings for this purpose, altho there will always be need for special buildings, in large cities at least, and in the case

of the school buildings there will have to be certain architectural changes in order to make the buildings very practical. The necessity for all-year work is absolute when we consider that the evening and winter work is concerned most largely with the great mass of working young people and with adults, and that the recreation movement now involves the great and fundamental question of the right use of their leisure on the part of all the people.

The third principle is that playground and recreation work must be in charge of trained leaders, directors, and supervisors—men and women skilled in calisthenics, gymnastics, athletics, plays and games, folk-dancing, music, child hygiene, first aid to the injured, child psychology perhaps, having a knowledge of social conditions and relations, and above everything else filled with the spirit of childhood and possessing a wide social and spiritual vision. This type of man and woman is the great need of the movement today. Its material progress has been far greater than the movement for the preparation of leaders. Some twenty-seven schools and colleges have added embryonic playground courses to their curricula, but there is no school in America today prepared to grant a certificate of qualification for leader or director in this great educational and social-recreational field of work. But with the interest now being shown by the universities, normal schools, and colleges, inspired by the growing demand on the part of communities that the teachers in the public schools have some knowledge of play activities, as well as the demand for professional leaders and directors, the next half-decade will find this weakness of the movement much strenghtened.

That there should be a separate department of the municipal organization, composed of men and women representative of various other departments and interests public and private, charged with the duty of studying the recreational needs and facilities, and of organizing and managing the recreational system, especially in cities of the first class, seems to be another settled principle of development. This department will be known and is known as a department of public recreation, having an executive officer known as the "superintendent of public recreation," corresponding to the superintendent of schools. This department will of necessity have to cooperate with and utilize agencies belonging to other departments of the civic organization, such as the schools, health department, parks, public library, police, fire, docks, etc. It will include in the scope of its activities playgrounds, athletics, boy scouts, municipal farms and gardens, municipal camps, excursions, development of play and recreation in the homes of the people; it will develop and encourage opportunities for recreation in connection with stores and industrial establishments, carry out celebrations of national holidays, organize and manage recreation centers, popular lecture courses, dramatics, musicals, band concerts, baths and bathing beaches,

and perhaps many other forms of activity having to do with the proper use of the leisure moments of the people.

In the smaller cities and towns and in rural communities the best results can possibly be attained by making the schools the focal point of organization and activity. This brings us to a discussion of the public-school system in its relation to the playground and recreation movement.

Even if the commission form of organization and management of a community's recreation program becomes the prevailing method, as seems to be the tendency now, the public schools will of necessity be the gathering point of much of the activity. There are several reasons why this is so. Among them are the following:

1. In the first place, even from a very early age, thru the gradual increase of kindergartens, the schools for three-fourths of the year have the majority of the children up to the thirteenth or fourteenth year, and modern city-life conditions are such that a feeling is developing that the schools should keep control for twelve months of the year and perhaps for a greater number of hours during the day. In some cities the children are coming under the supervisory control of the schools even in the evening for a portion of the time for study purposes (regular day pupils).

2. Again, the schools have the grounds, buildings, equipment, and most important of all, the teachers and leaders. It is significant that in the laying out of a playground system in any city the school grounds furnish a ready-made basis, inasmuch as they are in effective radius of every child in every community of the city. The school building does away immediately, as a general rule, with the necessity of erecting special buildings, such as lavatories, field houses or recreation buildings, which represents a great economic saving to the community.

3. There is a growing sentiment that the material expenditure represented in school grounds, buildings, and equipment ought to be returning to the community a greater dividend upon the investment than they are now doing, hence we have the movement for the wider use of the school buildings and grounds. This movement aims to make the school the center not only of the educational life of the community but of the recreational, social, health, and civic life as well. This has taken many forms, such as evening schools, vacation schools, popular lecture courses, community meetings, evening recreation centers, social centers, public baths, branch libraries, dental clinics, moving-picture shows, public gymnasia, clubs of all sorts, and other forms of activity of both the old and the young that might be mentioned. Perhaps it is not wise for the schools to branch out into this great field of social and recreational activity; but whether the school organization itself does this or whether it co-operates with a public recreation commission, the possibilities for constructive educational, social work are so great thru the larger use of this equipment ready at hand that the field ought not to lie fallow because of want of working.

4. The educational value of play is a matter of very old knowledge, but its significance and power have been largely lost under our present system of curricula organization. I shall not attempt to discuss at length this phase of the relation of the play movement to the school, but will refer you to that admirable little book *Education by Plays and Games*, by Professor George E. Johnson, as a basis for the study of this subject. If it be true, however, that play is the law of the development of the child; if it be true that his early years, to the adolescent period at least, are concerned with motor development primarily and not with intellectual development; if it be true that we are basing our educational efforts, in part at least, upon an appeal to the interest of the child; if it be true that the higher social relations of life cannot well be taught by precept but best thru action: we grievously err in not making the greatest possible use of this natural and fundamental instinct of the child known as "play."

SUGGESTIONS FOR THE DEVELOPMENT OF PLAY IN PUBLIC SCHOOLS

1. Space to play upon is the first consideration. It was the common custom of school boards in former days to secure just enough ground for the site of the building and a very small area of unoccupied ground around it. In the large cities of the East where the buildings were large, land values high, and the emphasis was placed upon the work of the child in the classroom, it was not thought necessary or economical to purchase large areas of ground. The same sentiment generally prevailed even in small cities and towns and in the rural districts of the entire country, altho there were many isolated instances to the contrary. The development of the play idea has given rise to a new sentiment regarding grounds, so that there is being set in many states a definite standard as to the number of square feet of play space per child that ought to be provided around the school building. This varies from thirty square feet per child in the large eastern and middle-western cities to a maximum of one hundred square feet in the Northwest coast region. A bill was actually before the legislature of the state of Washington making it obligatory upon school boards to provide one hundred square feet of ground for each child. This failed to become a law because of the governor's veto, but serves to show the remarkable change in attitude regarding the question of space within the very recent years. There are a number of concrete illustrations of this attitude also. The school board of Portland, Ore., this year spent $150,000 in enlarging their school grounds; Oakland, Cal., voted nearly half a million of bonds for the same purpose; Sacramento voted a large sum of money, some of which will be used for enlarging school grounds; Tacoma, Wash., likewise. It is the plan of Spokane when the million-dollar bond issue is available, which will probably be this fall, to purchase twenty-seven sites in connection with already existing school grounds, thus making them more adaptable and efficient in developing the play idea. There are many other instances of the same tendency even in the country districts, but these cannot be mentioned in this brief discussion.

The Playground and Recreation Association of America advocates the securing of at least three acres for every grade building and at least five acres for every high school. For the latter, ten or fifteen would be better.

Because of the cold and rain, and rain alone in some parts of the country, inclosed play spaces are necessary. These are generally located in the basement in most cities that have them, and as they are quite common no further mention of them is necessary. Play at its best, however, must be out of doors. In those sections of the country, notably the west coast, where the temperature is never so low as to be a hindrance to play in the open all the year around, but where rain is a preventing factor, covered playground areas are highly desirable. One such covered outdoor gymnasium and playground is to be found in connection with the Portland Academy, Portland, Ore.

2. The building should not be located in the center of the plot of ground

but in one corner or well toward the edge of one or the other side, thus leaving as much available space for plays and games as possible.

3. The school playground should be fenced for the purpose of management, of protection of property, and so as to guard against the grounds becoming the resort of undesirable persons. Sufficient ground around the fence should be provided for the planting of shrubs, vines, and perhaps for a strip of lawn. This parking gives greater seclusion and adds greatly to the beauty of the surroundings.

It may be found necessary to have a fence dividing the girls' and boys' side of the ground. For the prevention of accidents it is also advisable to have a low fence around the swings.

As to equipment, reduce it to a minimum. A sand court, a slide, some little swings, and building-blocks for the little children; swings, teeter-board, slide, volley-ball and basket-ball court, tennis perhaps, for the girls; and swings, teeter-boards, traveling rings, slide, horizontal bar, jumping pit and ball outfits for the boys—make a fairly good equipment outfit, and some of this may be done without. In locating apparatus, place wherever possible near the edge of the ground so as to leave as large, open space in the center as possible for running games and plays. If there is a manual-training department connected with the school, get the big boys interested by permitting them to make much of the apparatus, or parents' associations might be interested in doing this. If the money is available, it is probably more economical in the long run to buy the best commercial apparatus.

SUPERVISION OF SCHOOL PLAYGROUNDS

During the school year this will fall largely upon the teachers themselves, both for the recess and noon activities as well as for the activities before and after school if this system be adopted. For supervision outside of school hours, teachers should receive extra compensation based upon some regularly adopted schedule of payment for extra services. For the general supervision and in order to secure uniform work, the plan of having a physical director with one or more assistants trained in plays and games as well as in calisthenics and gymnastics might be followed. Playground classes might be organized among the teachers under the direction of the physical director or an assistant, as is done in Cincinnati and some other cities, so as to fit the teachers for leadership in plays and games. Teachers would find it profitable and interesting to attend the summer session of those colleges and universities giving courses in play, as in California State University, Wisconsin, Columbia, etc.

Vacation-school playgrounds if under school management are generally supervised by regular teachers who are willing to employ their time in this manner. In order to secure all-year-round work the suggestion is made that the broadly trained physical director be employed for twelve months of the year instead of nine, giving him charge of all play and recreational

activities centering in the school, with such assistants as the size of the school system and amount of money available warrant.

The kind of activities conducted upon school playgrounds we shall not discuss here, but will pass to a brief discussion of the possible changes in school architecture that the wider use of the school by the community demands. Suppose, for example, the school principal or the superintendent should desire to take up the recreational problem of the working boy and girl; of furnishing continued educational advantages to them and to adults; to assist in the assimilation of the adult foreign elements; to organize clubs; to hold music festivals; lectures, dramatic performances; to have a public bath-house or a public gymnasium—would the average school building of the cities and towns be fitted for this wide range of educational, social, and health activities? At the present time—no. Therefore certain features of the modern high-school and grade building must be extended and others must be added to meet this growing community need. A description of one such building in Cincinnati will serve to make this plain. The Eleventh District School in this city, in addition to the regular classrooms, has very large playrooms in the basement, with exceedingly high ceiling, a large auditorium, with stage and dressing-rooms, a library room, a reception room, a museum room, double kindergarten rooms, domestic-science and manual-training rooms, shower baths, and a large, splendidly equipped gymnasium. With the addition of a swimming-pool this type of building would be almost ideal for any use to which the community might desire to put it. The plans of the future grade buildings in this city call for swimming-pools also. A model building erected in Lexington, Ky., this summer has all these features, including a swimming-pool and a public laundry. School workers can do much in furthering the development of this more useful type of building by acquainting their school boards with these new features, and inasmuch as a great deal depends upon the advice of the architect as to the form of the building, they likewise could wield a tremendous power along the line of this development.

SUMMARY

1. The playground movement had its origin in the peculiar social conditions growing out of the urbanization of the population.

2. Its growth has been more rapid than that of any other national movement.

3. It has broadened its scope to include the play and recreational needs of all the people.

4. The fundamental principles of municipal control, need of all-year-round activities, need of adequate number of trained leaders, and of some special body to organize and manage a recreation system (especially in large cities), are well established.

5. Schools will always be important centers of play and recreational activity because they have the children, effectively located; have the ground, buildings, and equipment; have the leaders, who know the educational importance of play; and because of a growing sentiment for greater efficiency thru wider use, and because of larger vision of true education.

6. To meet these larger possible expansions of the school there must be larger grounds, better-trained teachers in plays and games, better organization of physical-training departments, correlation of play activities as a regular part of school system, proper laying out and equipment of grounds, and a modification of the architecture of the buildings.

*PHYSICAL TRAINING FOR GIRLS OF HIGH SCHOOL AGE—THE BIOLOGICAL POINT OF VIEW**

JOHN M. TYLER, PROFESSOR OF BIOLOGY, AMHERST COLLEGE, AMHERST, MASS.

The goal of education in our public schools is not merely learning or mental discipline, but power and efficiency. A century ago, when farming was almost universal, the home could furnish physical and manual training; could teach nature-study, agriculture, and the care of animals; and could educate to efficiency, industry, ingenuity, and responsibility. The disappearance of farm-life has crippled the educational efficiency of the home, and the whole burden of education is thrown upon the school.

Meanwhile the complexity of our civilization has increased vastly the wear and strain of life. We live mostly in cities and large towns, work in hot, ill-ventilated rooms, and use our brains almost to the exclusion of our heavier muscles. This, as Dr. Baxter has taught us, necessarily means increase of disease and weakness. The strain falls heaviest not on the tough muscles, but on the delicate nerves. It is an unhealthy life, which we cannot well avoid or greatly improve. We must train our boys and girls to meet and endure under unfavorable conditions a strain vastly greater and more severe than fell to the lot of our ancestors. Hence our system of education must make it its first business to train young men and women of overflowing vitality, of sturdy and abounding health, of toughness and endurance, of great power and efficiency. They must possess the largely physical virtues of courage, hope, and faith; of strong purpose and persistence; of dogged endurance in overcoming obstacles; of calm confidence in emergencies. These qualities I call physical virtues because they depend so largely upon the physical condition of the vital organs of the body, especially of the muscles and viscera.

The physical trainer deals directly and immediately mainly with the muscles and sensory organs. But indirectly or directly he can reach and mold every organ in the body from the digestive system to the highest centers and powers of the brain. "Health"—whether physical, mental, moral, or religious—"comes in thru the muscles and flies out thru the nerves." Physical trainers should do vastly more educational and missionary work in insisting upon the vital importance and wide scope of their grand calling.

But our muscles are of different kinds and ages. We have central

*Read before the National Convention Public School Society, April 9, 1909. Reprinted from the *American Physical Education Review*, May, 1909.

muscles of trunk, shoulder, and thigh, inherited from ancient fish or worm. They are fitted for the heavy work of life, far from precise in action, simple in movement. In their use a slight nervous effort or impulse calls forth a great muscular response. Their use reacts mainly upon the vital organs, stimulating heart, lungs, and viscera, and is largely, tho not entirely, hygienic.

As we pass outward toward the fingers or upward toward throat, mouth, and face, toward more peripheral muscles, their character and use gradually change. They are smaller and lighter, far more precise in action, capable of many and complex combinations and movements. Their use involves far more nervous strain or activity; and reacts, partly thru the accompanying use of the sensory organs, on the higher centers and powers of the brain. Their exercise is far less hygienic, and far more educational in the narrow sense of the word.

The human neuro-muscular system may be compared to a great cathedral organ. It has its fundamental bass and its peripheral upper register. It has its bass pedals, and its three banks of keys, which we may compare in our fancy to Hughlings-Jackson's three levels of nervous activity. There are simple stops and combinations. Think well before you pull. Attempts of a novice produce only discords; under the touch of the master a grand symphony rolls out.

So in physical training we must consider the individual, his or her daily work, need of relaxation or stimulus, age and calling, weak and strong points, and many other things. We must know just what results we are working for, and what combination and shade of exercise will attain this; we must pull the right stops and touch the right keys. System is of less importance than the results. By these we shall be judged. Let us now, therefore, glance at the high-school girl and her needs.

In the life of every individual at least three periods are distinct and well marked. Infancy and childhood form a period which should be devoted mainly to healthy growth. This is even more essential and fundamental than development. If growth be hampered, there will be less, perhaps very little, substance to be developed. The size and power of the man depends primarily upon how fast and far he can grow. A half-grown or stunted organ cannot possibly develop fully and normally, and remains a source of weakness and probable center of disease. Hence, in the lower grades we need mainly play and games to stimulate physical growth, and just enough work to stimulate the development of the sensory organs and the growth of the higher centers of the brain. Intellectual fatigue during this period is sin. Any output of energy which does not result in physical growth, especially if it demands the combustion of food and material which might be added to the growing tissues, is a permanent loss and injury to the organism. Hence, during this period the playground is a better means of education than the schoolroom; the game, than desk and book.

Even in the young adult, growth has ceased and development is slackening fast. Now comes the definite and final use of the organs built up during childhood. The aim of life is now the largest possible output of energy. The heart is large, the blood-pressure high, the tissues are less watery and far more resistant than in childhood. The adult expends freely what the child has put in the savings-bank of growth. Thus the habits, life, structure, and constitution of adult and child are altogether different and in some respects quite opposite.

But at some time the child must put away childish things and change into the man or woman of very different qualities and powers. This time of changes, so profound that they have been compared to the metamorphosis of a tadpole into a frog or of a caterpillar into a butterfly, is the period of puberty.

The girl enters it during her stay in the grammar school. At about ten her increase in height and weight falls to a minimum. Nature has begun to save and economize. Then come three or four years of very rapid increase in height, followed later, but partially overlapped, by a similar period of increase in girth. She enters the high school long, lank, and awkward, as if she had been violently stretched; she may leave it a few years later rounded and graceful as a woman, with full height and weight, but with tissues still immature. You all know how great and profound are the changes during this period—especially in the girl.

The growth in height has been an expensive process and has necessitated changes in the form of all the muscles, arteries, veins, and nerves. Nearly all the organs of the body are remodeled at the same time. Very large amounts of waste products are poured into the blood. This threatens to clog and poison every organ. Hence, the pubertal period, while one of very low death-rate, is one of maximum morbidity; one of very large amount of disorder, if we do not wish to call it sickness. Anæmia or poverty of blood, and pallor are often very apparent. The appetite for healthy food sinks. The clogged brain may become so dull that even a bright girl may temporarily be almost stupid. She suffers from cold, and is disinclined to the active exercise which she sadly needs. Constipation, headaches, and other disorders are altogether too frequent. The weakness of the muscles and bad habits of posture may have started spinal curvature.

In almost every city where a careful examination has been made of the health and physical condition of the girls entering the high school, there is surprise and often alarm at the results of the examination. Yet there is no reason for surprise or ground for great alarm. All these evils have been, and can be, completely cured or greatly mitigated by a rational course of physical training. If they are neglected and become deep-seated, disease or a period of invalidism is the logical consequence.

The first year in the high school is a trying and critical time for the average girl. If she has inherited any weakness of constitution or bad

tendencies, if growth has been hampered by unwise training or overpressure at home or in the earlier grades of school, if any disorders in the system consequent upon the pubertal changes have become more or less firmly established, the results of past evils will now become apparent. The first year of the high school demands close application and hard mental work just when she is least able to meet this demand. Frequently home duties occupy more or less of her time, or lessons in music or painting add to the already heavy burden. The results of overpressure or of physical disorder pass unnoticed or neglected by parents, who, like most, think that the critical period comes much later than it really does. Often the young woman of twenty or thirty pays the penalty of mistakes made ignorantly at ten or fifteen.

If at this time health can be thoroly established and maintained, and is not now or later undermined by social enjoyment and excitement, and the late hours of parties and theaters, her health and strength will steadily improve. This would seem to be a fair inference from the study of abundant statistics carefully gathered here and abroad.

The seat of the difficulty in the girl entering the high school seems to be that the waste is not rapidly and completely removed from the blood, the appetite is poor, or disordered; hence the tissues of the body are not properly nourished at the very time when the most nourishment is needed to enable the organism successfully to complete the metamorphosis. The waste can be removed only when and as it is completely oxidized; hence, lung capacity is of essential and fundamental importance. The average girl at this period has for each pound of weight hardly more than three-fourths of the lung capacity of the boy of the same age; and he certainly has none too much. Dr. Anderson's experience in a New York school seems to prove that rational and regular physical training will give the girl of twelve or fifteen lung capacity at least 30 per cent above that of the average girl of these ages. The exercise increases and improves the appetite, and stimulates all the vital organs by flooding them with pure and healthful blood. The nervous system is "toned up," the tissues are nourished properly, disorders already started on their evil course are corrected.

The pubertal period of the girl is usually somewhat or considerably shorter than in the boy. Hence the changes are more rapid, and the period is likely to be stormy. The boy is saved from the worst disorders by his open-air games. As a result of his freer and more healthful life, the waves of increase in girth and lung capacity occur with striking regularity about fourteen and sixteen. This increase in trunk capacity, and in size and power of the vital organs, enables him to meet all emergencies. Hence, at fourteen and sixteen the amount of morbidity falls sharply.

The average girl has no open-air games. As a rule, she never learns to play vigorously and properly, or to use the heavy muscles. She is

very fortunate if her mother and aunts are not continually discouraging tomboy play, and insisting on quiet, refined, dignified, and ladylike behavior. As a result of these differences of habit and of sex, the development of the high-school girl is quite different from that of her brother of the same age. The periods of rapid increase in girth and lung capacity which should correspond to those of the boy at fourteen and sixteen do not appear in her case, or are very irregular. Hence, there is no marked decrease in the amount of morbidity or disorder, which remains high from twelve or thirteen until eighteen or even later. The physical trainer must discover or invent suitable plays for girls, and must teach them to play. But this will avail little unless suitable places are provided where, free from all prying observation, the girl may play with all the freedom and abandon of her brothers.

When the biologist has analyzed the case and conditions, and has presented the problem, his work is done. It remains for you to suit the remedy to the girl's needs. But possibly you will pardon a few suggestions.

Puberty is a peculiar period, and demands a peculiar training. Systems admirably adapted to the needs of the adult woman or of the college girl may be altogether unsuited to the needs of the younger classes in the high school. Hence, we may well be cautious about holding too close to any system, however admirable for adults, or however highly recommended, until we have asked ourselves carefully whether it is just what the girl needs and how it should be modified for her case. The ideal system for young girls will come only from long and careful experiment. Otherwise we may increase the fatigue and disorder which we would remove. Our aim is very largely hygienic; hence, we use mostly the heavy muscles. To stimulate the lungs the exercise must be vigorous. The girl is anything but strong and mature; hence, our exercise must be light. The girl has little endurance; hence active exercise and rest periods should alternate rapidly as in any good game. If we exhaust or even fatigue, we have probably done more harm than good. The best time to stop is probably when the girl feels that she would like to continue the exercise forever. "Too much of nothing," not even of the best, is a very wise old Greek motto. The light or moderate dose of exercise should be practiced frequently; hence we should make it so interesting and enjoyable that she will repeat it at home. The more like play we can make it, the more of play we can put into it, the better.

We wish to give refreshment and recreation from the nervous strain and long sitting of school hours. We introduce plays and games. But when in interclass games we allow or encourage competition to run high, we are inducing the worst form of nervous fatigue. We may very easily exhaust rather than stimulate. Interscholastic and interclass basket-ball games, even in college, are probably more harmful than beneficial; they are surely worse for high-school girls.

During the last years of high-school life we may rightly hope for more vigor, strength, and endurance; and the exercise may well be made somewhat more difficult and strenuous. But the high-school girl is not yet a woman, like her teacher; her tissues are far from mature, and her heart far from strong. Our question is not, How much, and what kinds of exercise can she endure without evident and positive exhaustion? but, How much and what will best stimulate, without forcing, a healthy development? Finally, if we are to have healthy school girls and women, we must have a wise system of physical training in all the lower grades.

DEPARTMENT OF SCIENCE INSTRUCTION

SECRETARY'S MINUTES

OFFICERS

President—George A. Cowen, West Roxbury High School.....Jamaica Plain, Mass.
Vice-President—W. J. V. Osterhaut, Harvard University.....Cambridge, Mass.
Secretary—H. T. Clifton, Pasadena High School.....Pasadena, Cal.

FIRST SESSION—Tuesday Forenoon, July 11, 1911

The meeting was called to order by President George A. Cowen with about one hundred members present.

The following papers were presented:

"Elementary or General Science from the Standpoint of an Eastern Schoolmaster," by George A. Cowen, head of Department of Science, West Roxbury High School, Jamaica Plain, Mass.

"General Science in the High School," by Lewis B. Avery, principal of High School, San Jose, Cal.

"Elementary or General Science for High Schools as It Appears to a Western College Professor," by W. C. Morgan, assistant professor of chemistry in the University of California, Berkeley, Cal.

The papers were then discussed by the following: Fred H. Cowan, junior master, Girls' Latin School, Boston, Mass.; Percy E. Rowell, Gardena Agricultural High School, Los Angeles, Cal.; Willis E. Tower, Englewood High School, Chicago, Ill.; H. L. Terry, state high-school inspector, Madison, Wis.; and W. T. Skilling, State Normal School, San Diego, Cal.

The President appointed the following Committee on Nominations:

S. E. Coleman, Oakland, Cal.
Otis W. Caldwell, University of Chicago, Chicago, Ill.
H. L. Terry, state high-school inspector, Madison, Wis.

SECOND SESSION, ROUND TABLE—Tuesday Afternoon, July 11, 1911

The department met in round-table conference at 2:30 p.m. to discuss the topic, "Conservation of Natural Resources." About two hundred members were present.

The various phases of the topic were discussed in papers as follows:

"Forests," by E. T. Allen, forester and secretary, Western Forestry and Conservation Association, Portland, Ore.

"Water-powers, Lands, and Minerals," by George C. Pardee, former governor of California, and member of the National Conservation Commission, Oakland, Cal.

"National Vitality," by William F. Snow, M.D., secretary, California State Board of Health, Sacramento, Cal.

"The Teacher's Part in Conservation," by Frederic Burk, president, State Normal School, San Francisco, Cal.

THIRD SESSION—Friday Forenoon, July 14, 1911

The meeting was called to order by President Cowen, with forty members present.

Helen C. Putnam, M.D., chairman of the Committee of the American Academy of Medicine to Investigate the Teaching of Hygiene, Providence, R.I., was introduced and

explained the work of the Committee on Efficiency of Janitor Service in School Buildings, emphasizing the great need for study and action on this subject.

Dr. Putnam also read a part of the committee's report dealing with the scientific basis for ventilation standards, the material being collected by C.-E. A. Winslow, professor of biology, College of the City of New York, New York City.

The report of the Committee on Nominations, read by the chairman, was as follows:

For *President*—W. C. Morgan, assistant professor of chemistry, University of California, Berkeley, Cal.

For *Vice-President*—William Orr, deputy commissioner of education, Boston, Mass.

For *Secretary*—C. Riborg Mann, associate professor of physics, University of Chicago, Chicago, Ill.

On motion duly seconded, the ballot was cast for the above-named as officers of the department for the ensuing year.

It was voted to continue the Committee on Efficiency of Janitor Service in School Buildings for another year to make a further study and to report at the next meeting.

A vote of thanks was extended to Miss M. Alice King, chairman, and to the members of the local committee assisting, for their excellent arrangements and kind attention in connection with the department sessions.

H. T. Clifton, *Secretary*

Since adjourment of the convention President W. C. Morgan and Secretary C. Riborg Mann have declined to accept the offices to which they were respectively elected for the reason of their inability to attend the next convention. These two offices have been filled by appointment, on authority of the General Executive Committee of the Association, as follows:

President—David Starr Jordan, president of Leland Stanford Junior University, Stanford University, Cal.

Secretary—H. L. Terry, state high-school inspector, Madison, Wis.

Irwin Shepard, *General Secretary*

PAPERS AND DISCUSSIONS

ELEMENTARY OR GENERAL SCIENCE FROM THE STANDPOINT OF THE EASTERN SCHOOLMASTER

GEORGE A. COWEN, HEAD OF SCIENCE DEPARTMENT, WEST ROXBURY HIGH SCHOOL, JAMAICA PLAIN, MASS.

When from all over a great country there arises a demand for political reform, there is hot haste on the part of legislators to amend or change the law.

At the present time there is an unmistakable demand for some change in the method of science teaching, so that some kind of elementary or general science may be taught in the early years of the high-school course.

As evidence of this demand all over the United States may be mentioned the many articles in the educational magazines, showing what courses have already been established in cities like Boston, Springfield, Chicago, and San Francisco, and in addition to this the requests that are being constantly sent to publishing houses for textbooks covering such courses.

This demand shows a healthful condition in the country at large. This second decade of the twentieth century has a right to ask that its children get the largest possible amount of scientific training.

A large percentage of the children entering the high school never graduate; never even arrive at a point in the course where the more serious courses in science are pursued. If these children are to be served by the school, instruction in science must be given at such a time as they will be able to avail themselves of it.

Unfortunately these are the ones who will enter business houses where scientific knowledge will be at a premium, not as engineers and experts, but as important cogs in some industrial process, as heads of departments and managers. The course for these boys must be of such a nature that their minds will be directed in such channels, that in later years or at once, they will be able in their own way under no particular guidance, to follow intelligently the development of industrial science. The parent and the community have the right, are under obligation even, to demand such training for their children.

Another class served by an elementary first-year course will be those boys who in the later years of their high-school course will be called upon to choose intelligently the science that will be of greatest use to them in later years, and who will then go to some technical school. It would discover the boy with the mind best fitted for science, so that "no mute inglorious genius" may remain hidden. It is designed to awaken the boy's mind at the time when such an awakening should come.

A third class to be benefited will be the high-school girl, who in many cases will find such a course all she needs of science in her scheme of education. The girl destined for a scientific career will be served by this course to the same extent as the boy.

The general purpose of the course is to give to everyone a glimpse into the fields of science with the hope of awakening some, stimulating others, and to make the best use of a great educational factor.

To be of greatest benefit to the child and to the community the work must be based upon the common phenomena of everyday life. In the first place the child must realize that the knowledge gained will be of use to him at once, to lighten his own labor or to add to his enjoyment. This will most often be accomplished by passing the information gained in school on to the parent. By way of illustration it is safe to say that no country boy who has toiled at the old-fashioned grindstone will be content to do so longer when he has found out the advantage of roller or ball bearings, which can be so easily applied to this machine. This knowledge gained will be of benefit to both father and son. No girl who has learned the ease with which a fireless cooker can be made and the economy that is secured by its use, will be content to live in a hot kitchen. These two illustrations will serve for the many that might be given.

In the second place, the child will be working upon problems that he has long appreciated and wished to understand. The method of finding the circumference of the earth, the distance of the sun and moon, can easily be made clear to a mind rather immature. It is one of the ways to show to a child that there is really some value to the study of mathematics beyond the most elementary processes. But above all it is a great satisfaction to make clear what have so long been the great mysteries of the universe.

Of necessity a large amount of demonstration experiments must be made by the teacher before the class, to secure an appreciation of the care and skill with which experimental work must be done. In fact, at the age at which pupils enter the secondary school it is the motor side of the mind that is most active. It is necessary that he learn from models, things in motion, forces acting, rather than from the abstract statements of books. Such work makes heavy demands upon the strength and resourcefulness of the teacher, but it pays. I am not certain that this method is not applicable to boys and girls of more mature years than those we are considering here.

The most vital part of the work under consideration is the experimental work done by the pupil at home. There are several reasons why this method is successful and therefore desirable.

It interests and instructs the parent as well as the boy or girl, and has led to a spirit of comradeship between the two. The mother often holds while the boy turns, or takes some other part in the operation. In some cases it has aroused and revived past experiences; in others it has helped the parent to get in touch with the development of science that has taken place between her youth and her maturity.

It stimulates resourcefulness, because in the home there will not be found the same kind of apparatus that would be found in the school laboratory, but oftentimes none the less effective, and many times much better for the purpose. It is much more interesting and instructive to classify the kinds of machines in a sewing-machine found at home than to work with small models of machines found in the laboratory. The making of a good diagram of the cook stove, combined with a description of the parts and an explanation of their use, will always be a valuable exercise.

The interest of the child in this kind of work is such that it will compete with the attractions of the street in the cities and larger towns. It is really more fun to work at some of these problems than to loaf.

Some of the things made are of use in the home and will be of service for years. To make the course effective some apparatus must be loaned to the child in the same manner that school books are loaned. It has been estimated that such a list of apparatus would cost not far from $1.50. The things loaned have been Bunsen burners, alcohol lamps, thermometers, test tubes, glass tubes, rubber tubes, lenses, and a metric rule. The other

things have been found in the kitchen or somewhere on the place. Some things have to be borrowed, an advantage as it brings a larger part of the community into the game. The best part of it is that they are glad to join in the work. A certain group of boys owes a debt of gratitude to an engineer at a sausage factory where was an artesian well. In his younger years he had made oil wells in Virginia. He was as glad to tell what he knew as the boys were to hear.

But after all it is the apparatus that has been made that is the greatest source of satisfaction. The samples that I have brought with me show what has been actually done, and what can be done by anyone anywhere.

Of course if a child has unlimited money at his command many of the needed articles would be bought, and he would lose some of the benefits of the course, which is designed for the child that will have to bear the burden and heat of the day as soon as he is able to bear it.

It is the careful experimental work of the teacher in the classroom that enables the boy to work in what is a fairly accurate manner. He must never be left without supervision. The written record of everything done must be closely watched. The apparatus must often be brought to the classroom for criticism, and for suggestions for improvement. The best of everything is sometimes presented to the school as a part of its permanent equipment. The pieces I have with me will serve in that way till something better appears.

The notebook also should be a scrapbook containing many things from the daily press and magazines bearing upon the topics under consideration at the time. A book so kept will be of use all one's life.

The course has been so arranged that the work is taken up in the order in which it would arrange itself in the mind. No attempt is made to separate the different sciences. The phenomena of nature do not present themselves as chemical or physical facts, but as facts to be explained in the best possible manner.

The part of the work devoted to the study of air will illustrate my meaning in a very simple manner.

The air is made up of three very important gases, oxygen, nitrogen, and carbon dioxide, which are each prepared and described. Each of them has some important relation to vital processes, which are explained. The weight and pressure of the air and the dependence of many important facts of everyday experience upon these facts naturally follows. The buoyancy of the air suggests balloons, clouds, and airships. Air in motion introduces winds, storms, and weather. The wind as a servant of man brings out windmills, sailing vessels, transportation by sea, the dissemination of seeds, climatic conditions.

It is plain to see that the beginning of the topic dealt with things generally studied in a course in chemistry, which was followed by subjects considered in physics, after which came physical geography and botany,

all of which were necessary to a complete understanding of the nature and behavior of the air. Other topics are taken up in much the same manner.

In the course under consideration the work has been divided into sections as shown in the following outline:

Some units of measurement and their history.
The earth as a planet.
The envelope of water.
The envelope of air.
The earth a store-house of energy.
Machines to use energy.
Fuel.
Heat and heat engines.
Sound and sound waves, simple musical instruments.
Ether and light waves, simple optical instruments.
Acids, alkalies and their combination.
The chemistry of some very common household commodities.
Electricity and some of its applications.
The earth's crust. Soil. Plant life.

Experience has proved that a course like this awakens a healthy interest in scientific things, a desire to know more, shown by the eagerness to follow other and later courses in chemistry, physics, and biology.

It also certainly gives a survey of the whole field that cannot help being a lasting asset to the child compelled to leave school early in the course.

GENERAL SCIENCE IN THE HIGH SCHOOL

LEWIS B. AVERY, PRINCIPAL OF HIGH SCHOOL, SAN JOSE, CAL.

In the following discussion, it is my aim to answer two questions—one, as to whether the high-school curriculum should include a course in general science, and the other, as to how such a course, if included, should be organized.

General science today, to use the Harris-onian and Hegelian terminology, seems to be in a state of "becoming." Proponents and skeptics alike will agree that it has not "arrived." The skeptics will urge this against it and its friends will commend it therefor. The ordinary science of the high school has "arrived." Few lines of school study are today as logically arranged, as refined in methods, as clearly defined in field, as well and uniformly taught, and none others so well equipped as the sciences in the high school. They begin somewhere and go somewhere by clearly ordered steps. They "arrive." But unfortunately, the young people do not.

The very processes that have perfected the sciences in the high school have served to narrow their field of usefulness, and this has occurred in conjunction with a most marvelous spread of the rule of science in the affairs of men. Nature-study—the natural way for science to begin, ever since the Almighty brought the animals before Adam that he might name them—is, at the best, sporadic, rare, and seldom arriving at perfection. Pupils

enter high school with no definite attempt having been made to acquaint them with the field of science. Of all the fields, that is the only one that has been left uncultivated—and that, notwithstanding they are about to enter a life where science is largely ruling. Pupils have no rational basis for choosing among the excellent science courses. They must take the advice of some school comrade as to whether the subject is a "snap," or is interesting, or decide by the requirements of the universities. In beginning a science they enter a study logically arranged on the clear principle that the subject-matter should proceed "from the simple to the complex." They meet the simple cell, remote from their previous experience. The delightful definitions of atoms, molecules, and the like, and the elements and principles of simple machines generally fail to arouse the enthusiastic response in the beginner's mind that they do in that of the teacher, who sees and feels their vital significance as making nature "one tremendous whole." But further, high-school pupils ordinarily take but one or two sciences to graduate, and those who do not graduate generally take none. Even the coming collegian finds his course will allow but the usual amount, and takes physics and chemistry perhaps, and goes thru life with no comprehension of the simplest biological principles, or, choosing biological subjects, fails to have any education in the laws of energy. The mission of machines in an age of machines, and the ordinary processes of combustion may remain to him, tho an educated man, as much of a mystery as to the fire-worshiper, while the ignorance of the ordinary college graduate in the simplest astronomical relations sustained between our planet and its neighbors would justify Ptolemy in posing as an advanced scientist.

In short, in our present high-school courses, any general view of the field of science is lacking, the choice among sciences in the high school is a random choice, and small effort is made to approach the subjects thru the channel of real interest.

Let me dwell on this last point a moment. There was a time when reading was taught by beginning with the letters—the elements. Today we seek something with a content with which to begin, as the word or sentence. We further try to have the content a real one to the pupil. When the publishers rushed into the Philippines to assist the American school teacher so nobly (as they always do) they brought forward their American reading-books. But an obscure publisher bethought himself that it might be well for the first reading-lessons to have a Filipino content—in other words, they should be "about something about which the Filipinos know something about," and the American-Filipino teacher responded, and the books today possess the islands. This principle that has been recognized in reading has also leavened teaching generally, even in high school. Latin no more clings to the logical mode. The "rule first" method is long ago obsolete. The doctrine of interest has vitalized all teaching and has converted methods of approach. But the high-school sciences remain an

exception till they shall be preceded by a general view of the whole field of science, after which they can be chosen rationally and pursued with a purpose, an interest, an efficiency, and a profit heretofore unobtainable, and incidentally, the student who does not get to the special scientific course in his education will be the superior of the graduate of today both in interest and in knowledge in much of the scientific field.

This is the age of the specialist, and specialization is at the foundation of efficiency in the narrow fields in which specialists must work, and on them is founded much of the movement of this marvelous scientific age. But the work of the specialist is today endangered by a lack of general scientific knowledge on the part of the public it aims to serve, so that the ordinarily educated man is unable to distinguish among specialists. The spurious as well as the genuine are apt to receive equal homage. Label it scientific and it goes! A broader general foundation will benefit the people, will create a more intelligent appreciation of the truly scientific, and will give a better soil in which to discover and develop specialists. The present science curriculum of the high school is made distinctly for the specialist and by the specialist. It should be preceded by a science curriculum based upon the people and their interests.

This is the foundation of the call for the general-science course and the call will continue until it is properly met. I know of but three courses that have been organized by the high school to meet this call, and wish to suggest a fourth.

First. It has been met by an eclectic course of a little from each of the sciences. This has not been without value. Teachers, however, soon find that the attempt to present physics in six or seven weeks to immature minds is impossible. As long as one tries to teach physics as such, the logical nature of the subject as a unified body of theory will not down. It can scarcely be so presented in a year to seniors. The attempt so to present it to ninth-year pupils has proved unsatisfying.

Second. In the second method, interest has been made the guiding principle. This has really been a course in nature study transferred to the high school. It proves inspirational whenever at any age we may wander at will with a leader filled with his subject and able to inspire others. Such leaders are rare, however, and the high-school age is peculiarly the age when it is the work of the teacher to teach concentration. Nature-study is not a study at all and it is hence impossible to discuss its value. It has no guide but interest, and interest may be caprice, and the value of caprice as a guiding principle is too varied to admit of discussion. The nature-study method of conducting general science doubtless sometimes produces good results, even in high schools, but it is too heterogeneous in composition, uncertain in content, and indefinite in aim and accomplishment to allow it a place in the curriculum.

Third. The physical-geography treatment of general science acquires

the dignity of a high-school subject. The physiographic core gives it homogeneity and definiteness. The natural laws which have operated to build this earth into the home of man extend into all fields of science, and of the three methods, this stands in my mind markedly superior to the other two in its adequacy as a foundation for a high-school subject covering the scientific field.

It presents a few marked limitations and defects, however. Its scientific field is primarily that of natural phenomena while the scientific environment of the high-school pupil of today has more to do with the artificial applications of science to life. Indeed the whole movement of civilization the last fifty years has been directly due to the application of science to life. Science, and invention founded upon science, have remodeled the modes of living. Nature, perhaps unfortunately, is no longer the tutor of our youth. Applications of science to life envelop them on all sides, take their attention, and demand their mastery and explanation as the price of supremacy.

Fourth. These conditions form the foundation for the call for the new subject, general science. It must deal with the real scientific environment of youth, linking it clearly with the field of nature and natural phenomena, and delving as far therein as circumstances and surroundings warrant. This limit will evidently vary with country and city, and in general, with conditions.

The organization of such a subject must be along the lines in which science ministers to the life of man, and particularly, the life of the pupil. These lines may be largely summed up under the following heads: sanitation and hygiene, food, clothing and shelter, heating, lighting, communication, and transportation. Thru these channels natural laws have been made to contribute to the progress and enlightenment of men. Thru these concrete applications the youth are to be led back to the field of nature and natural laws—the field of thought and theory.

Such a course will be elastic both in time and in content. It may cover one year of the present high school. It would better cover three years beginning with the seventh year—the first year of the coming intermediate, or preliminary, high school. A class is not by it limited from wandering afield in the laboratory of nature, but the teacher may at any time determine his distance from the core of his subject, the application of science to life. Interest may still inspire but caprice cannot run riot.

Physiography may then cease to serve as a mere cement to hold together otherwise unrelated phenomena and take its appropriate place as a somewhat technical science by the side of other high-school sciences.

General science has doubtless come to stay. Nowhere save in the high school and only thru some such course as is today under discussion, can a catholic scientific interest and individual culture be promoted. The accomplishment of these general educational ends will also make possible the

discovery and development of better specialists along with a saner and more appreciative public. What the form of this course shall be depends upon the teachers of the high schools, and not a little upon you here present.

ELEMENTARY OR GENERAL SCIENCE FOR HIGH SCHOOLS AS IT APPEARS TO A WESTERN COLLEGE PROFESSOR

W. C. MORGAN, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

(*Abstract*)

We must admit in approaching this subject that the conditions found in the average high school are not what its inception promised. The high school has not yet found itself. When we find in an actual curriculum four years of Latin, four years of history, four years of English, two years of science, and two years of mathematics, we are forced to the conclusion that this curriculum is the result of some special interest or that someone has been using some leading string and tying up the course of study with it.

The question should not be the entrance requirements of some particular higher school, nor the needs of some particular subject, nor the hobby of some particular teacher, a specialist in a science, but rather what will give the average students the best training in fitting them for the problems of life. For, as is well known to you, the statistics show that not more than one-half of the students of our high schools get beyond the first year, three-fourths of them never enter the third year, and less than 1 per cent go to college. It is for those, therefore, who must make the most of the one year of the high-school work which they get and for those who do not reach the final years or go on to college that this "best" training should be planned.

But more significant than these to me are the figures of the United States Bureau of Education for the decade from 1896 to 1906, which show that every single other subject with the exception of Greek, which held its own, shows an increase in the number of students enrolled. The science subjects show a decrease. However unpleasant these facts are, we must face the situation. No argument offered in explanation of this decrease, which I have found, can account for this, except it be that the sciences have been tried, but have not produced the results which could confidently be expected of them. It is not that the sciences alone are failing to produce entirely acceptable results, but only that since we have our problems, we should face them and earnestly endeavor to bring about their solution.

It is therefore after such a preliminary consideration that some of us are ready to suggest as a solution the incorporation of a general-science course into the curriculum of the high school, "general" in the sense that it shall include the underlying principles which are common to all sciences—those underlying principles which are basic in our scientific knowledge and

which it is important that all students should get before leaving our high schools. A course in general science should contain something which is valuable to every citizen and such a course should take from any source that which is genera .

The older sciences have become stereotyped and one of the best signs of the virility of general science is that no one feels sure what the details of such a course should be. It will not do to present such a course as so many weeks of this science or so many weeks of that; for such a course there is no more admirable series of textbooks than that series known as "Steele's Fourteen Weeks" in the various sciences. They were published forty years ago. The old method of keeping each science in waterproof compartments of the brain, with no method of communication, is bad. One of the hopes of a course in general science is that this will be overcome. I should prefer that there should be no textbook for such a course, for as soon as this occurs we shall find that the teacher who is in doubt about the proper method of approach to the problem in hand, will climb upon the textbook and float around as upon a life preserver.

It will require the best teacher in the school. It should not be the youngest teacher who is asked to teach the course, because "the high school in the next town has put in such a course, and surely this school must not be left behind."

It will require a teacher with many years of preparation on a broad foundation, a specialist perhaps in one line, to give the training in getting to the bottom of one subject, but in addition a broad training in science as a whole. There are few such teachers now. Those who have listened to such men as Dana, Lyell, Brewer, Aggassiz, or the two Le Contes of our own University of California, will realize the ideal type I have in mind.

It is perhaps well that we have little work of this sort in operation now; that it is to be. It must be a slow process and be carefully developed.

This course must make a blend, as it were, of the various sciences. The best illustration I can offer you, the one which best expresses to me the idea of the course I have in mind, is that of a shuttle, which in the hands of a skillful teacher shall weave back and forth over the whole field of science, now on this side, now on that, yet keeping thruout that thread of the basic principles.

As long as general science does not become crystallized into a minimum requirement it will grow. This course cannot end in a definite time, it merely stops at the end of the year.

Do not mistake me, I am not decrying in any way the various sciences as a part of our curriculum. I am a teacher of chemistry myself. I am rather trying to find the co-ordination and unifying factor which will aid us in our work as science teachers, besides giving those students who do not go far with the higher courses, some really worth-while knowledge of the world about them.

General science will not give to all students ideas which will be of the greatest service to them, but by eliminating elementary material common to all, it will advance the standard of work in subsequent scientific courses.

The course is bound to come. Let us, therefore, each one of us, when convinced it is a good thing, put our shoulder to the wheel and help push along the work that is before us.

DISCUSSION

FRED H. COWAN, junior master, Girls' Latin School, Boston, Mass.—If general science is to be found in the high-school curriculum of today, it will be because there is good reason for its being there. This reason may be briefly stated by saying that the eyes of the pupil must be opened and incidentally he will be fitted for other science which may follow.

I am not alone in believing that there is a time when the mind of the pupil is particularly open to interest in scientific things. If at this time he is given an opportunity to see a little of the various sciences in the right way, interest may be awakened that will follow him thru life, being a great blessing, for which there is no real substitute. We have excellent examples of this in the pleasure that comes to some lives thru the study of the flowers and the birds. In addition to all this, many a boy or girl may obtain the vision of a future livelihood along the various avenues that lead out from physics and chemistry as a starting-point.

I have heard it said that if one neglects for too long a time to give attention to music, he may finally find it impossible thoroly to enjoy this very desirable branch of the fine arts. In something the same way, I believe that if a pupil fails during the early years of the high school to have his attention called to the general field of science, he may never have a keen appreciation of that which might have been a source of lifelong satisfaction. Many pupils never complete the high-school course, and if they get no appreciation of science in the high school, there is less chance for its development afterward. Again, if thru deferment or thru its omission altogether, a pupil leaves high school to enter college without this appreciation, he is not likely to develop it there; and I must say that, in my judgment, a great injustice has been done the pupil. My judgment is based upon the observation of men who have led me to believe that he who adds to a thoro knowledge of the fine arts a keen appreciation of science in some of her various forms has much more to enjoy in life and, more than that, has a great deal more to give others.

My experience in teaching college-preparatory physics in a Latin school for girls has led me to believe that a general course in science, in which some of the interesting and fundamental principles of science could be taught, would greatly add to the usefulness of my present course. Here, almost for the first time, the girls approach the great field of science with which the very nature of their lives has made them unfamiliar. They approach it so abruptly and with so little real preparation that they stagger under its weight and may never see its real beauty. If, before reaching this point, thru the medium of general science they could be introduced to a few of the extremely fascinating things of science, they would be greatly helped and would be eagerly looking forward to the work.

I doubt not the same difficulties have been noted in the teaching of other sciences, and I am firm in the belief that a really successful course in physics, chemistry, biology, and physical geography needs to be preceded by some preliminary work just as much as the reading of Latin with appreciation requires some introductory study.

If our courses in science are to hold the place among our high-school courses which their importance in life demands, they must have sufficient content to win the respect not only of pupils but of fellow-teachers.

It is to be hoped that general-science courses will be established which shall open the eyes of all pupils to the beauty of science and shall impress upon them the great importance of science study.

PERCY E. ROWELL, science instructor, Gardena Agricultural High School, Los Angeles, Cal.—I concur with what Dr. Morgan has said in regard to making the course in general science worth while to every citizen, and of drawing from every source its subject-matter. There should be taught the experiences of a life which is broad and complete. The other sciences have failed in so far as they were intended to stimulate a desire on the part of the pupils to continue in science. Whether this is due to the sciences or to the method of instruction is a question. Many of the poor results which have been manifested in science are due to the wrong method of presentation in the classroom and to the lack of intuition on the part of the teacher. Words, rather than sense, have been accepted in recitations. Formulas, and not thought, have carried the pupils thru the class. Parrot learning, and not mental growth, has characterized the effect on the pupils. Nor are the other studies exempt from this evil. All suffer equally.

The sciences themselves have been taught in a logical manner. It might be well to ask from what standpoint a science is taught logically; from the pupil's or the teacher's? For whose mind is the course given? I believe that sciences have been too logical; there has been too much attention given to "natural sequence" and too little consideration paid to the wishes of the pupils, who can recognize no "logical sequence" until they have passed on and can review the subject as a whole. This condition has aroused an unconscious mental shrinking from the formal sciences and a natural drifting either to the less highly organized sciences, or away from science entirely.

Dr. Morgan very happily put it when he mentioned "stereotyped courses" and "water-tight compartments" of the brain, in each of which there might be knowledge of one science without any possible communication with the other sciences. We have the "stereotyped course," a minimum allowance of well-articulated facts joined in "natural sequence." We also have the results of such courses. Yet the separateness of studies other than science is just as manifest. It may be that both the "stereotyped course" and the "water-tight compartments" are the unavoidable results of the accrediting system, since the pupils think more of units as units and not as indicating parts of their education. There are no connecting links between these parts. General science will do much to break down this wrong idea of units and the sacred individuality of each division of science.

A course in general science must be well planned if it is to continue to be general. Some guide is necessary and it would be well for each teacher to make an outline to which more material could be added from time to time. A teacher should take notes of what he gives a class after he has given it, as well as preparing beforehand. A corresponding group of general-science teachers could formulate an excellent plan of work, for each would learn from all of the others. As a preliminary outline it might be well to take up a consideration of a person's experiences from the time he awakens in the morning until he arrives at school. Upon this as a skeleton there could be produced a live course, interesting and instructive, without the much-lauded "logical sequence."

The ambition of a good teacher is to make the pupils realize that all sciences are branches of one great science, and that all learning is but one complete whole. To give to the pupils this comprehension requires that they be taught first the ability of obtaining a birds-eye view, a general survey, strong in variety but necessarily lacking in details, of much of the school's work. The sciences may so be presented by a true course of general science.

WILLIS E. TOWER, Englewood High School, Chicago, Ill.—We have heard the East and we have heard the West and we find them both in favor of a carefully taught general-science course. I can say that the teachers of the central states are with you. Ten or

fifteen years ago a similar movement was started, but the courses which resulted became specialized. I am pleased to hear the statement that such a course should not be allowed to become crystallized. We shall not again fall into the former error. The Board of Education of the city of Chicago has authorized courses along these lines and they will be given during the next semester.

I agree that the best teacher in the school should give such a course—one of extensive experience as a teacher and thoroly grounded in the broad field of science.

H. L. Terry, state high-school inspector, Madison, Wis.—I am very much pleased with the tone of the discussion. The time has come to plot out constructive work. Let us have more in the line of telling us what to do. How can we help teachers to do this work, and give them suggestions to carry away with them? One reason that such a course probably fell into disrepute before was that the work was standardized too soon. The development of a piece of machinery, as an automobile, requires time to produce satisfactory results. There is danger of ultimate commercial failure if such a machine is standardized too soon.

Individual initiative is necessary and out of it will come something of value. Teachers so often are afraid to try for themselves. Those having authority should be willing to say to the teacher, "Go ahead and use your own best efforts to do the best thing." This will give the teacher confidence.

Teachers lack ability to test results. They do not know how to tell if they have accomplished something. Questions in the class should be so framed as to make these tests. Girls will do as well as the boys; it is a mistake to believe that they cannot do good work in physics. Bring home the lever to them by the example of the motion and arrangement of the broom as they use it in sweeping and see if it has the same difficulty to them as when tied to something they know nothing about. Expansion could be discussed in connection with the ring used with the lid on a stove, and the discussion may develop some things you had not thought of yourself. Ask the students if one piece of ice can be colder than another? Cannot a meeting of this kind devise such tests?

W. T. Skilling, State Normal School, San Diego, Cal.—I am interested in the work mentioned as possible for the seventh and eighth grades. We are now doing some good work in California along this line. It has been mentioned that teachers are very often not well prepared for science teaching. If the universities and normal schools can properly prepare teachers for work in the seventh, eighth, and ninth grades, I can see no reason why the course cannot be made a success.

The movement now in progress in California toward making the seventh, eighth, and ninth grades an intermediate school will give an opportunity for rearrangement of courses along the lines suggested.

FOREST CONSERVATION

E. T. ALLEN, FORESTER FOR WESTERN FORESTRY AND CONSERVATION ASSOCIATION, PORTLAND, ORE.

Presumably discussion here should be definite, practical, and constructive, rather than inspirational. Assuming that you realize the need of forest conservation and are most anxious to consider means of promoting it, I shall confine myself chiefly to the problems before the worker.

To present a subject of so many aspects to representatives of so many regions is extremely difficult. The problems at issue are largely local, their solution much a matter of personal appeal to populations with

differing interests. Failure to realize this has often been harmful by giving currency as axioms to principles sound enough locally but by no means axiomatic.

Forest conservation embraces protecting existing forests, growing new ones, and economical use. The chief local interest may lie in saving the lives and homes of settlers from forest fires (it would hardly be this in Illinois); conserving all-important stream-flows, as in southern California; maintaining a primary industry as in the Pacific Northwest; preserving a necessary commodity, as in localities where the import of lumber is costly; insuring an import supply elsewhere, as in totally non-forested regions; or safeguarding school revenues, as in states having timbered grant lands. Some of these things are of national importance in every sense, others only in that distress and prosperity are communicable. Game, scenery, health, pleasure, and morals are also all indirectly but surely involved to a considerable extent.

While many of us may have a wide field of endeavor on occasions of this kind, and perhaps more in writing, after all our greatest usefulness is in our home fields of constant and familiar contact. Presumably we can do most good by the best handling of our local problems, leaving others to do likewise in their fields, and so contributing with them to a completed whole. Instead of scattering our effort and necessarily being superficial, we should learn our local ills and remedies thoroly and make the most of our peculiar opportunity to teach others. In nothing more than in conservation does hammering on one nail till it is driven home build faster than devotion to so many and such general projects that ourselves and others become confused. To a certain point, agitation of a general principle is useful. It is well to dwell on the evil of forest fires. But when a forest ranger finds several fires burning he neither talks generalities nor runs from one to the other making futile momentary attacks. He puts one out and then goes to the next. In almost any locality we find some principle of forest preservation of paramount urgency. I believe it is the part of wisdom to concentrate on this even to the neglect of others if necessary.

Nevertheless, it is well to know enough of our neighbor's problems to avoid crossfiring. Take, for example, our attitude toward the lumber industry. It may be—I do not know—that in some parts of the United States lumbermen as a class oppose forestry progress because private gain conflicts with community good or because they fear unreasonable restriction. Before criticizing the whole industry for this, it is well to reflect that in some regions, on the other hand, lumbermen lead the rest of the community in advocating better management and better laws. If you antagonize them by unjust censure you lose your best support. Again, consider the controversy over the relation of a lumber tariff to conservation. While one element was certain it would save our own forests to import Canadian lumber, it was shown equally conclusively that in many

of our lumbering regions competition would lead to faster and far more wasteful cutting. It is a fairly good rule not to take any side before understanding one as well as the other.

There are, however, several wide premises everywhere applicable. In the old world and new they became established with the diminution of forest resources. The unfortunate thing is that few communities profit by the lessons of others, no matter how often they are reiterated. We hear much of European forestry, yet in nearly every European country it has been a complete upbuilding after almost total forest destruction. England in India, and perhaps Japan, are about the only foreign nations that have really tried to forestall. The United States is no exception to the rule, and considering that it has even more examples elsewhere to observe, more modern advantages of education to facilitate deduction, more foundation with which to begin, and more wealth with which to work, it is the least excusable of all.

It seems to me we must frankly admit, basing our propaganda accordingly, that we do not approach older and more paternally governed nations in responsibility for the future. Whether we ascribe it to the still existing wealth of resource, or to selfish individualism, the fact remains that we are prone to safeguard present interests only, and if we postpone forest preservation until this national trait is outgrown we will be making too late a start. Up to very recently forestry reformers have been too idealistic to get results. They have dwelt upon the needs of posterity and urged sacrifice as a duty. I cannot quarrel with this as a matter of ethics and I admit it essential to complete success, but immediate results come most surely from fear of immediate injury. Even good laws are of small use unless we have the public of today sufficiently worried to insist on their enforcement. The great need is for adding to our preachments of duty more vigorous and skillful appeals to human selfishness. It may not satisfy our reforming instincts, but too many of those who really control our forest destinies will respond to nothing else.

How, then, shall we do this? Again I say seek local arguments. Do you live on the Atlantic Coast? Look up the payroll total for all lumbering and woodworking industries in your state and the total selling receipts from their manufactured products. The size of the revenue thus kept at home, but which will leave you if these industries have to move nearer some other source of raw material, will probably amaze you as much as it will the public. Learn how much your consumers pay annually for all forest products and figure how much they would save if there were no import freight bills. Then learn the rate of growth of your own species and refute the popular belief that it is too slow to enable saving these sums to those now living. Do you know that Massachusetts is today manufacturing its fourth crop of white pine?

Learn your area of waste land, and with the same definite growth

figures to give your statements news value and convincing business accuracy, show what it might be earning the community by producing forest commodities. Calculate the tax revenues your existing forests bring, and that which forests on now waste land would pay, and show the consequent reduction of taxation on other property. On definite premises of area, growth rate, and conservative crop values, show the revenue obtainable by the state from forest reserves of its own, balance this against the cost of such a project, and prove that you could lower all taxation just as they do in Europe. Study the effect of deforestation on stream flow, use specific familiar examples, and convert the injury into dollars and cents. When you get figures in all these calculations, turn them into popular comparisons that are easily grasped.

If you live on the Pacific Coast, forget that white pine grows rapidly in Massachusetts and appeal to local pride by saying that here, undoubtedly, is the nation's woodlot, where climate and rapid-growing species give an advantage over the East which it is a business crime to leave ungrasped. Show that the area denuded by fire and use will produce an equally valuable crop in, say, sixty years, and that leaving this land idle is costing our five coast forest states about thirty million dollars a year. Add this loss to the loss of standing timber by fire and show that the coast is throwing away nearly seventy million dollars a year which otherwise would be distributed thru every channel of industry.

Without considering reforestation, show that the lumber industry now brings one hundred and twenty-five millions of dollars a year to the Pacific Coast, mostly distributed for labor and supplies. Compare this to our fruit crop or our wheat crop and remember that it will increase by leaps as gulf- and lake-state timber fails. Do you live in California? Get at your tongue's end such facts as that California has over three hundred billion feet of uncut mature timber, that probably it will all be cut in less than fifty years and that even at present prices this means distribution of at least four billion dollars among Californians. Show the wreck of industries that would follow its sudden destruction by fire and point out that partial destruction means the same thing in corresponding degree.

If a score of American citizens are endangered by an uprising in China no price is too great to pay for their protection. When a few hundred sailors went down in the Maine, we were aroused to the supremity of national effort—war. Were the lives of the hundreds of men and women who met a fearful death in last year's forest fires any less precious? their sufferings less cause for national horror and effort to prevent repetition? I cannot but believe that the neglect of our people to observe the same care with fire in the woods that they exercise as a matter of course at home, the refusal of our legislatures to appropriate a few thousand dollars for fire prevention when they cheerfully do so many less urgent things, the infre-

quency with which our courts punish violators of forest-fire laws, must be due to failure by those of us who are responsible for American education to impress a true comparison of values upon the public mind. Forest fires are a national calamity, akin to riot, invasion, and pestilence, and yet almost entirely unnecessary. Other countries avoid them. It follows that we can. It is only necessary to teach people that fires result from avoidable carelessness, that this criminally imperils human life, and that forest protection is prosperity insurance from which they themselves are certain gainers. That this is a considerable task is all the more reason for giving it far more thought and vigor than we have given.

Distinct from the individual citizen's personal responsibility and conduct is the manifestation of sentiment in the form of collective policy or endeavor. Considering the specific agencies most active and potent in forest conservation, we readily recognize three primary divisions of activity—federal, state, and private. It is desirable to know which can most effectively employ our assistance. In my opinion the government needs least help of the three. It was early to realize the need and has been the leader in reform. The federal forest service is our highest authority in technique; the national forests are our most conspicuous examples of practice. Altho the principles they represent by no means escape attack, fortunately they may be regarded as permanent institutions developing steadily for the better.

There is far greater need of attention to the situation of our states. Many have done nothing. Those that have done most have very generally developed certain lines at the sacrifice of others. Hardly any has a comprehensive farseeing policy which takes into account both present and future conditions and provides for systematic development as one replaces the other. Laws are passed in response to popular clamor or the insistence of a few tireless enthusiasts and sometimes they have excellent points. Often they contain weaknesses proven and discarded elsewhere long ago. The need of some action is increasingly admitted, but there is little grasp of the fundamental principles of forest legislation.

Here again we must divide the duty of the propagandist. To get and enforce forest legislation he must do the missionary work I have described to impress the community that it is profitable and necessary. He must also be competent to present good laws and prevent the passage of bad ones. He cannot know too much of the principles and technical framework which will insure freedom from politics, just distribution of the cost, effective organization, strict and enforceable fire laws, a systematic patrol and fire-fighting force, facilities for educating lumbermen and public, technical investigation of forest conditions and needs, acquisition and management of state-owned forest lands, and, above all, co-operation with and stimulation of endeavor by private forest owners. If he neglects these things, his very success in agitation may result in legislation worse than none.

All this involves considerable knowledge of the attitude of the private forest owner, which is usually given far too little study. After all he controls most of our forest area. His use of it, our use of it, and the effect of our relations upon our joint use of it, largely determine our forest destinies. The extent to which his conduct need be regulated, and the extent to which we can get equal or better results by encouragement instead of regulation, are matters of grave importance. H. S. Graves, chief forester for the United States, believes in the encouragement plan. He says, "Private owners do not practice forestry, for one or more of three reasons: first, the risk of fire; second, burdensome taxation; third, low price of products."

My own experience emphatically corroborates this. Whatever may be true of the past when new fields were easily available, the lumberman now sees his industry dependent upon forest preservation. No laws or threats are as potent to interest him in conservative management as the promise of continuing profit. In the Pacific and lake states at least (I know less of other regions), he leads the rest of the community in both advocating and practicing protective methods. The three states in the union making the most notable advance in forest legislation last winter were the three in which the timber industry led the campaign—Washington, Oregon, and Minnesota. The most efficient and liberally supported fire-preventive systems in America are the co-operative associations of the Pacific Northwest, where timber owners spent no less than seven hundred thousand dollars in 1910 to protect our forest resources. Admitting that their motive was largely selfish, the benefit to the public is the same.

The same is true of reforestation. The chief, if not the only, thing which prevents the private owner from adopting a course in this as advantageous to the public as his fire prevention, is his very fear of the public's attitude. And he has good reason for this fear. At the same time we demand that he practice forestry and threaten him with legal regulation if he refuses, we not only continue to imperil his proposed investment by fire, but also maintain a tax system that will confiscate it if it escapes. It seems to me inconsistent to preach forestry to the lumberman while we are ourselves responsible for a tax system that we know every country in the world had to abandon before it could have forestry. We are bound some day to pay for lumber what it costs to grow it. Obviously it will pay us to make its growing easy instead of difficult. If we make the growing impossible, we will not be able to get it at any price.

I have tried to show that many forces are working for better management of our forest resources. They are sure to succeed eventually, for economic laws leave no alternative. I have failed to be clear if it is not equally apparent that danger of too much delay lies in their working at cross purposes instead of in harmony. There must be more mutual understanding, less mutual suspicion, and more actual and constant co-operation.

These things alone will create public sentiment, teach proper methods, pass wise laws, and lessen cost to all concerned.

The moral is that what forest conservation asks most of educators now is not the teaching of more forestry practice so much as it is the teaching of forest economics. And while we make the most of every opportunity to teach the grown-up folks who can do things today, let us not forget that had these been taught in school, when they were more easily reached and impressed, they would not need it now. The young folks of today are the doers of tomorrow, and whether they do better than their parents depends much upon whether you see that they learn at least the elements of the problems I have discussed here.

WATER-POWERS, LANDS, AND MINERALS

GEORGE C. PARDEE, MEMBER OF NATIONAL CONSERVATION COMMISSION, OAKLAND, CAL.

"Water-powers, lands, and minerals" are the subjects that have been assigned to me for discussion. There are two principal ways in which these subjects may be handled from the standpoint of the conservationist. One way is to present a mass of statistics, confusing both to listeners and reader. That way I shall not follow. The other way is to discuss the subjects cursorily from the standpoint of the ordinary, everyday citizen, and to point out, from the standpoint of the conservationist, what is being done under present conditions with the water-powers, lands, and minerals, once the property of all the people, but now, to a very large extent, the property of a very few of the people.

The conservationists believe that the natural resources of the country that have not yet fallen into private ownership belong to all the people. They know, do the conservationists, that such of those natural resources as are necessary to the ordinary activities of the people have fallen largely into the hands of private owners. They also point to the fact that these private owners have very largely monopolized these natural resources and, using them for the purpose of quickly amassing enormous fortunes, are either destroying them absolutely or are withholding them from public use for the purpose of finally compelling the public, their former owners, to pay still greater prices for them or their products in the future.

The conservationists believe that all the natural resources should be used. But they also believe that none of them should be unnecessarily destroyed or wasted or put into cold storage, so to speak, in order that, not being used now, they may be used at some future time when, the supply being less than at present, famine prices may be charged for them.

The conservationists point to the fact, for instance, that for every ton of coal that has been put into use in this country practically another ton has been lost, destroyed, or wasted in the mine, not because that extra ton could

not have been saved at a profit, but because more money could be made by mining one ton and leaving the other ton in the mine. The conservationists also point to the fact that private ownership of the forests of this country has resulted in the absolute destruction of a large part of those forests and that the present unscientific logging of the privately owned forests has led and is leading today to the destruction, as forest land, of practically every acre that is logged. They also point to the fact that three-fifths of all the remaining forest lands of this country are held in private ownership; and that, while some of these privately owned two hundred million acres are being absolutely stripped of their trees and being left as bare as floors, the rest, a very large half, is being held in cold storage in order that when, as will be the case, the children you are teaching in the schools of the country shall, within the next twenty-five years, desire lumber and timber for their ordinary, everyday use, they will be compelled to pay the then owners of the forests all their necessities will compel them to pay for that which their forefathers gave away for nothing.

All conservationists are not socialists; but all conservationists cry out against that mistaken governmental policy which has permitted private persons to acquire ownership of absolutely necessary natural resources and so to manipulate them that, shutting out competition, they compel those who gave them away to pay enormous prices for them. But they also cry out loudly, do the conservationists, against the loss and waste, most of it unnecessary, that have resulted from the money-seeking haste of the private owners of those natural resources.

Power is an absolutely necessary adjunct as an instrument of our present-day civilization. It will be still more necessary, and in a constantly increasing ratio, to the children whom you are teaching in the schools. If the people of the United States were suddenly deprived of the use of steam, water-power, and electricity, they would nearly all starve to death. Coal, oil, water-power, and electricity are the "Open Sesame" to the vaults of progress and prosperity.

Electricity, generated by the power of falling water, is the cheapest, most efficient, and best source of power we have. The falling water which generates this power is, always has been, and always will be the property of the people and cannot be taken away from them. But it has been the policy of all of the states and still is of all but a very few of them to permit private persons to appropriate, for nothing and forever, the use of that falling water, to make private property of that use, and to make of that use a monopoly which, like all unrestricted private monopolies, is a bad thing and detrimental to the public good.

With their available coal, oil, and water-powers privately owned and monopolized, the people of this country will be at the mercy of a power that can and, of course, will demand all the traffic will bear and control the activities and commercial productiveness of every man, woman, and child in the Republic.

Not a few of the states are, however, beginning to recognize the imminent dangers of this situation. Oregon and California have inaugurated policies that will prevent the private ownership and monopolization of all the water-powers and will provide for the future by making competition always possible in the generation of electricity.

Illinois is spending one hundred millions of dollars to develop her waterways. Of this sum not a small fraction is being spent to buy back, at high prices, of course, water-powers, developed and undeveloped, that she gave away for nothing. New York is bestirring herself to get back the control of her water-powers, so that her people may not be held in the grasp of a power monopoly. Wisconsin is also engaged along similar lines. And other states are beginning to appreciate the dangers that confront them.

The conservationists do not primarily care who owns the natural resources. If they could be assured that it would be best for the country to have all the natural resources privately owned, they would favor that. If part private and part public ownership should appear to be best, they would advocate that. If public ownership of all the natural resources should appear to be best, then the conservationistis would earnestly advocate that.

Public ownership would not necessarily mean public exploitation and management. Alaska coal, for instance, may continue to be owned by the public and be mined by private enterprise. The public ownership would render impossible the monopolization of that coal and make futile any future attempts to create out of it the means for extorting from the Pacific Coast unnecessarily high dividends from the fuel necessities of our people. Public ownership of that coal would prevent the shutting down of one coal mine in order that another coal mine might be worked at a greater profit. It would insure healthy competition in coal on the Pacific Coast and prevent the continuance of the extortions of private monopolies. But it would not necessarily prevent private capital from being invested in Alaska coal mines or from making reasonable, even handsome, returns on such investments. It would, however, prevent the holding up of the public for one of the necessaries of life that was once the property of that public.

Public ownership of the water-powers of the country would not necessarily result in the public development or management of those water-powers. California does not contemplate engaging in the water-power business, nor does she contemplate generating electricity for the market. But she has come to the conclusion that it is time to stop giving away her water-powers and allowing them to be used for the purpose of extorting from her citizens present and future all their necessities will compel them to pay for the use of property all of which was once theirs.

In California alone the streams are, it is roughly estimated, capable of generating five million horse-power of electrical energy. Mr. Andrew Carnegie estimates that there are employed, in the whole United States,

less than thirty million horse-power generated by steam, electricity, and other means. One horse-power per annum is said to be equivalent to the power generated by the burning of twenty tons of coal under a steam-boiler. California's five million horse-power of possible electrical energy are, therefore, equivalent to the steam-power generated by the burning of one hundred million tons of coal. With coal selling at ten dollars or more per ton, our five million horse-power of electrical energy will, when it is all in use, represent power equivalent to that generated by the burning of coal to the value of one billion dollars per annum.

Under the former lax laws of California the streams from which power may be obtained were filed upon many times over, and the use of their water appropriated many times over; and the water-powers have been falling rapidly into the hands of speculators and monopolists. Mr. Herbert Knox Smith, the United States commissioner of corporations, informs us that California's power market is already practically monopolized by three or four large companies and that there are very positive indications of the gradual formation of a power trust all over the country.

The price of electric-power in this state is, because of these monopolies, maintained at a price that makes it little if any cheaper than coal approaching in price ten dollars per ton. If the water-powers of this state are saved from complete monopolization and, under partial public ownership, so operated by private enterprise that a healthy competition is not only possible but certain, the people of this state will save many millions of dollars annually in their bills for the use of property that always has been, still is, and always will be, theirs.

It is claimed by the opponents of conservation that the conservationists are cranks, socialists, communists, even anarchists. We conservationists heartily indorse the following from President Roosevelt's address to the Conference of Governors,

. . . . it is safe to say that the prosperity of our people depends directly on the energy and intelligence with which our natural resources are used. It is equally clear that these resources are the final basis of national power and perpetuity. Finally, it is ominously evident that our resources are in the course of rapid exhaustion.

Former Governor Hughes, now a justice of the United States Supreme Court, said, in his 1907 message to the New York legislature:

. . . . it is well to consider the great value of the undeveloped water-powers thus placed under state control. They should be preserved and held for the benefit of all the people and should not be surrendered to private interests. It would be difficult to exaggerate the advantages which may ultimately accrue from these great resources of power if the common right is duly safeguarded.

To all of which the conservationists say "Amen." For all of our coal will one day be burned up and all our oil will have been pumped from the earth. When that time shall have arrived any monopolies in these resources will die of inanition. But water-power will exist so long as the sun and the

attraction of gravitation continue to work in co-operation. And, therefore, any monopoly of water-powers will have no time limit; but, unless cut short by self-defensive, "socialistic" laws, will endure "as long as grass grows and water runs" and the sons of man are compelled to labor and manufacture.

The work of one horse-power of electrical energy is estimated to be equivalent to the labor of thirteen men. California's five million water-horse-power, therefore, represent the labor of sixty-five million toiling men; and Mr. Carnegie's thirty million horse-power used in the United States today accomplish the work of three hundred ninety million men.

He who controls, then, the water-powers of this country will be, in effect, the owner of an army of slaves over four times greater in number than the ninety million men, women, and children now within the borders of this Union.

Who shall own that army, direct the energies of that enormous power, and levy toll upon those who use the products of its labor? Shall it be a very few of our people? Shall that toll, its size set by those few, be collected from every American citizen by those whose natural and very human desire it will be to collect "all the traffic will bear"? Give me a monopoly of a nation's power-plants and I will not care whose foot rocks its cradles, what hand writes its songs, or who makes its laws. The cradles and the songs will not interest me at all; and as for the laws, I will write myself all of them in which I have any interest, until some kind of a revolution unseats me from the throne.

But few of our minerals are really necessary to human progress. Gold and silver and the precious metals may enrich those who mine them. But a monopoly of them will destroy itself because they are not necessary to the life of man. Spain, altho she had a virtual, law-created monopoly of the world's gold in the sixteenth century, was poor because she had that monopoly. Gold plows and silver steam-boilers would be of little value as plows and boilers. The conservationists, therefore, have little concern about the gold and silver mines. Some of them advocate the requirement that those who work them shall pay into the public treasury a small percentage of their returns. But the great majority of the conservationists had much rather see the forests, the coal, the iron, the oil, and the copper used with economy and free from monopoly than that half a hundred gold or silver mines should be opened up.

Speaking of our iron and coal, Mr. Carnegie said: "Iron and coal form the foundation of our national prosperity." And then he said that, under the wasteful private ownership and monopoly that have controlled our iron and coal, we have consumed seventy-five billion tons of coal and wasted ninety billion tons in getting that which we consumed. And he predicts that all our known deposits of high-grade iron ore will have been worked out by 1940, only thirty years from now. Our iron and our forests, therefore, will, if nothing be done to prevent it, disappear about the same time.

Coal and iron, being public necessities, have, of course, been monopolized under our lax laws. There is plenty of coal to be mined. But coal famines are not infrequent and the price of coal is always kept as high as the necessities of the people will permit. There is plenty of iron ore and its cost is very low. But the steel trust that owns it has not reduced the price of the steel we use to keep pace with the reduction in the cost of raw material. The man who pays high prices for his coal and iron ought to see the grotesque humor of the situation that forces him to pay exorbitant prices for the privileges of using natural resources that were once his and which, desiring to use, he gave away for nothing and forever without any strings on the deed of gift. Had Robinson Crusoe given his Man Friday everything on his island and had then been compelled by that dusky companion of his solitude to work all day for permission to pick, at nightfall, a few bread-fruits to sustain his life, his condition would have been somewhat similar to that of the ninety million American men, women, and children who consume the iron and coal they gave away.

The conservationists are very willing indeed that those who exploit our natural resources shall be handsomely rewarded for their enterprise and the risks they take. But the conservationists object very strenuously to the wasteful methods used in exploiting them under unrestricted private ownership. The conservationists also object very strenuously to the monopolization of the natural resources of the country and the consequent high prices we have to pay for their products. In private retail businesses there are no great monopolies. The retailer is compelled to submit to competition. He lives or dies in business according to his business ability. The conservationists object to there being no competition in the wholesale businesses connected with the disposal of the natural resources which we gave away in order that we might enjoy their use.

Our land laws have also been unsatisfactory. While they have enabled millions of American families to acquire cheap homes and farms, they have also enabled less than two hundred private persons and corporations to gain ownership of three-fifths of all the remaining forests of the country. They have permitted one corporation to own one-eighth of all that forest land. They have enabled one man to own one million acres of that forest land in the state of California alone. If one hundred men each owned as much land as this one man owns, they would own collectively an area equal to the area of the state of California, the second largest state in the Union. Is it necessary for me to argue the evils of absentee, or even domestic, ownership of enormous tracts of land?

So long as there was fertile and arable public land to be had, the grip of the land monopolists did not strangle. But as the available lands of the country passed into private ownership, the large holdings became burdens on and menaces to the body politic. True, large holdings of farming land are no longer profitable and are, therefore, being subdivided

and disposed of in small holdings. But the former owners have profited by the "unearned increment," and many who would have made homes in the country have been compelled to join that sorrowful army that has so long been marching into the cities in ever-increasing numbers. The last buyer of the acres of the large land-holdings pays many times the price for it that the government—that is, the people—disposed of it for in order to "settle up the country" and "encourage and promote agriculture."

The farming-land situation is in process of settling itself—at great cost, to be sure, to those who are settling it. But the forest-land situation is still bad and growing worse all the time. The government, it is true, has set aside certain forest reservations, totaling one hundred fifty million acres, half again as large as the state of California. But the remaining two hundred twenty-five million acres, over twice as large as California, are held by less than two hundred individuals and corporations.

It would not be so bad, from the standpoint of the conservationists, if unrestricted private ownership of forest land did not mean its absolute destruction as forest land. For private owners, very naturally and very humanly, insist on making the most money possible out of their holdings when they submit them to the ax. And that means, of course, the absolute destruction of the forests. It is not necessary, I think, to demonstrate before you the absolute necessity of the forests to human progress and prosperity. We need perennial streams for river navigation, irrigation, and power and freedom from destructive floods.

Some of the private owners of large tracts of forest lands are holding them untouched by the ax; and they imagine that this is conservation. It is not. For conservation means use. And forests may be used, are being used in other countries, without reducing their areas or productivity.

There is, however, hope for the future. Even the courts, conservative to the verge of mulishness, are beginning to see the necessity for the protection of the body politic from those who have been given public property. The Supreme Court of Maine, speaking of private real property, said this:

> First, such property is not the result of productive labor, but is derived solely from the State itself, the original owner; second, the amount of land being incapable of increase, if the owners of large tracts can waste them at will without State restriction, the State and its people may be hopelessly impoverished and one great purpose of government defeated.

And the Court of Errors and Appeals of New Jersey has said this:

> The State, as quasi-sovereign and representative of the public, has a standing in court to protect the atmosphere, the water and the forests within its territory, irrespective of the assent or dissent of the private owners of land most immediately concerned.

Maybe this is socialistic, communistic, even anarchistic. But let us hope that the supreme courts of all the states and the Supreme Court of the United States may soon become as socialistic, communistic, and anarchistic as the supreme courts of the old states of Maine and New Jersey.

Let us hope that all the courts, subordinate and supreme, in every state in the Union, may soon be able to appreciate the necessity for the conservation of all our natural resources, and that they may, all and singular, soon learn that the public good, present and future, is of infinitely more importance and value than any man's private property, especially when waste and destruction of that property will work an irreparable injury to the public.

The theory under which our natural resources have been given away is the perfectly correct one that they should be used for the benefit of the public. A coal mine or a water-power that is not used is of no benefit to the public. When, therefore, natural resources are given away by the people and put into cold storage by those to whom they are given, the theory upon which they were given away is ruthlessly violated in its fundamental assumption. For the only present use to which cold-storaged natural resources are put is the use of artificially keeping up or increasing the price of the products of the things we gave away.

Water-powers, land, and minerals are, next to the forests, the most necessary of all our natural resources. They must be husbanded; they must not be unnecessarily wasted or destroyed, if those whose educational footsteps the teachers of this country are guiding shall not be robbed of that which, by moral and divine, if not by statute, law, is rightfully theirs.

I know of no class of our people who can do more than our teachers to inculcate into the minds of the people of this country the ideas of conservation. The Johnny and Mary of today will be the Mr. Smith and the Mrs. Brown of tomorrow. While, as "young ideas," they are being taught to shoot in other directions, let them also be taught that there is a conservation target, a bright and shining one, at which their aim should be directed, and bound up in which are their future prosperity and material happiness. Let them also be taught that what is ours today will be theirs tomorrow, and that they have the right to demand that we shall hand over to them their property undiminished in value and volume except in so far as that value and that volume may be diminished by our reasonable, careful, and necessary use of it.

NATIONAL VITALITY

WILLIAM F. SNOW, M.D., SECRETARY, CALIFORNIA STATE BOARD OF HEALTH, SACRAMENTO, CAL.

All who have occasion to glance thru the many literary and scientific periodicals as they appear on our news stands from month to month must be impressed with the increasing frequency with which articles on health appear. There can be no doubt that the nation is awakening to a realization of the great possibilties of health conservation. The remarkable Report on National Vitality prepared for the National Conservation Com-

mission by Professor Irving Fisher, and published in 1909, has had much to do with this awakening. The realization of the great saving of human life now proven to be scientifically possible can only be brought about thru educating the public in the application of the hygienic and sanitary principles involved.

In the first place parents must be taught that planting good health does not differ in principle from planting any other crop. Good seed must be sown in the right soil and with due regard to the environment. Many things must be done between the planting and the harvest if one expects a maximum yield. The fruit farmer follows up his planting by making a business of aiding the growth of his trees. He protects them against drought by irrigation, against frost by smudging, against insect pests by fumigation and by the importation of friendly insects to prey upon the pest. The infant trees are wrapped in swaddling clothes in winter and provided with sun shades in summer. Being clothed they must be fed. The farmer studies their diet and buys the necessary fertilizing chemicals advocated by the horticultural experts. Their leaves must have sun and their roots must be housed in properly ventilated soil; therefore, the farmer cultivates his land and battles with the weeds. And all the time he is saying to himself: "In a few years more they will begin to bear fruit." The placing of wind stakes and props, the digging for borers, the all-night irrigation, the fight with the birds and the rabbits, are but incidents in the day's work of the successful fruit farmer. All these things about the growing of trees the public understands and practices. Similar things are known and practiced in the growing of animals, but the growing of humans has never been taught as an important business enterprise. There are two great reasons for this. In the first place, the normal baby born to healthy parents has a tremendous vitality and power of adaptability to its environment, which distinguishes it from the little tree. This gives rise to the impression that with the baby the proportions of food and sleep, air and sunshine, work and play, are of little consequence. In the second place, from fifteen to twenty years are required to mature the crop, which since the days of slavery has had no directly quotable market value when produced.

It can be demonstrated, however, that good health is a valuable crop. Each of us, for example, expects to live to be at least sixty or seventy years old. And if we come of good stock, have been carefully cultivated, and have developed good habits we ought to live so long. Yet each of us knows of a number of friends with similar expectations who became blighted and died. Some of tuberculosis, some of typhoid fever, or malaria, or diphtheria, or scarlet fever, or any one of a hundred other causes. When we stop to think of it most of them died before the age of thirty or thirty-five. The twenty years or more they might have lived would have been most valuable to the prosperity of our nation. Many of these friends

have been young men with families. Each man's labor would have provided at least one thousand dollars a year, which means a loss of at least twenty thousand dollars to thirty thousand dollars for his family.

The public must be taught that the problem of conserving national vitality is not in preventing death so much as in postponing it. On every hand one hears the statement "Well, I've got to die sometime"; but it makes a very great difference in the nation's prosperity and in the happiness of individual homes whether this event transpires before twenty-five or after fifty years of age.

Growing humans is an industry which far outranks all others in importance to the nation, but it has not been properly taught. President Jordan says:

> The best gift to a baby is a healthy father and mother—physically healthy, mentally healthy, morally healthy. Such a gift is not to be found every day, but it is rather to be chosen than great riches. It *is* great riches, for, accident or mischance aside, it means efficient life, joyous life, life that is worth while.

This is absolutely true, but the means for developing such gifts has not been perfected. Our schools have struggled with partial success to provide the "mentally healthy" part of the gift. Our churches have struggled with less degree of success to provide the "morally healthy" part of this gift. It has been nobody's business to provide the "physically healthy" part of this great gift to the baby; so nobody has done it. We are all at fault—educators, ministers, statesmen, laymen, all alike. We have been too much occupied with our personal affairs to give the child in his entirety a thought. President Wheeler referring forcibly to the importance of the family in California's future, said:

> It is my observation that the finest thing in life is a strong man, married to a strong woman, living within their means, and providing the personal care and physical necessities for the up-bringing of strong children.

These are the statements of presidents of universities that rank among those most progressive in the United States today; yet the curriculum of either institution will hardly stand investigation in the light of its president's statement. Our universities are doing practically nothing to train our young men and young women in the knowledge essential to the building of happy, successful homes, and providing the baby with that best of gifts so well described by President Jordan.

If this were true only of our universities it would not matter so greatly, for less than 3 per cent of our school children graduate from them. It does matter that our grammar schools fail to grasp their opportunity to adequately teach health conservation. In California, as doubtless in the rest of the United States, approximately 85 per cent of our school children leave school to enter our industrial occupations before the age of sixteen. Here then lies our great problem in conserving national vitality. How

shall we reach these young boys and girls with the facts about individual health preservation and community protection against invasions of disease?

We must teach the children that it is an inevitable law of civilization that co-operative citizenship results in the growth of great cities where each individual citizen becomes merely a unit performing in return for his living, his share of the work necessary to the life of the whole. In the biological world the law of physiological division of labor operates similarly. The human body is made up of several millions of cells working together to accomplish the work of man.

New York City is estimated to have food supplies within its borders for less than forty-eight hours. Obviously, the defense of New York against an enemy depends quite as much on the protection of its contributing farms and its water supply as upon its harbor fortifications. The case is not different in the wars of the human body with disease. The food supply of the body is gathered from the markets of the world. Disease germs that may contrive to get into a food which is being shipped from Japan have only to keep alive during the vicissitudes of transportation until they pass the lips of the consumer in California in order to begin their battles for supremacy over the human body. It is not the primary purpose of these armies of disease to destroy the body, but to subjugate it, and to obtain for themselves a living at the expense of the body's cell-inhabitants. Once the battle begins, however, no one can foresee whether the fierceness of the conflict may not result in the complete destruction of both defender and foe.

No city is well fortified which has not provided many methods of checking the advance of the enemy after the outer defenses have given way. It is necessary to remember thru all that may be said and printed about fighting disease thru public co-operation, that a normal, healthy, active body provides within itself the means for effectively resisting the attacks of these disease-producing germs ninety-nine times out of a hundred, even after they have succeeded in penetrating its outer defenses—the skin and mucous membranes. This failure one time in a hundred, however, is sufficient to cause annually approximately ten thousand deaths in California and upward of five hundred thousand each year in the United States. If we would hope to save year by year these ten thousand Californians from death and one hundred thousand more from lives of painful and needless invalidism, we must study the methods of the enemy and take the offensive. The two great resources of these enemies lie in their invisibility and their ability to multiply with incredible rapidity.

Science has demonstrated ways and means of preventing the more deadly of the disease-producing "germs" from reaching those members of a community whose physiological defenses will not protect them. It is for us as teachers to popularize these demonstrations of science, and to encourage effective work in their application to the localities in which

we live. Can you calculate for your community what it would mean to have no malaria, no typhoid fever, no diphtheria? Can you conceive the possibility of having no tuberculosis, measles, scarlet fever, whooping cough, mumps, lockjaw, blood poisoning, pneumonia? If you can determine this in terms of human happiness, industrial efficiency, savings-bank accounts, you will realize what it will mean to teach the coming generation how to fight these great enemies, among which the ones mentioned are only those familiar to us in every community.

The teachers of today have in their classes the trustees, legislators, educators, business men, and most important of all—the mothers—of tomorrow. If they will accept the opportunity before them to make themselves field generals, and their students a well-trained militia for these battles of the human race against disease, we may yet realize the statement of Pasteur when he first conceived the agency of bacteria in the production of disease.

It is a significant fact that many hundred thousands of dollars are being subscribed annually in the United States for educating the public in health preservation. It is still more significant that this money is not being spent thru our public schools, which ought to represent the highest efficiency in economy and effectiveness of educational work.

It is not a valid argument that much of this education deals with the adult. If we need schools for the adults, our educational system should be elastic enough, and our educators should be quick enough to foresee the need and provide for it.

When we realize the needlessness of the tremendous sacrifice of life—especially of young adults and infants—we wonder why it is permitted to continue. In the words of former Governor Hughes:

> It is only because we are accustomed to this waste of life and are prone to think it is one of the dispensations of Providence, that we go on about our business, little thinking of the preventive measures that are possible.

This is literally true, we do not think the thing out, but if anyone doubts the truth of these things let him go to the cemetery with his local registrar of deaths and have pointed out to him the graves that should not be; then let him go the rounds of the empty homes where struggle, poverty, and sadness have replaced independence, joy, and the fullness of life; after he has made his computations let him challenge their accuracy.

With the adult public it is necessary to emphasize the economic and social phases of the problem of national vitality in order to enlist their attention and action, but among ourselves as teachers this is not essential and because the time is limited I shall speak briefly of only two points which should be discussed:

1. What shall we teach about the body and its resistance to disease?
2. What shall we teach about sex hygiene?

There are two classes in the United States: one believing us surrounded on every side by invisible agents of disease, enemies from which only careful sanitation will save us; the other believing, on the other hand, that we should endeavor to increase the physical efficiency of the human body and with cheerfulness and optimism to the front we need have none of these disease germs.

It seems best to take a middle ground. One would not think of willfully disturbing a rattlesnake to the end of allowing him to place his bite upon the body. The difficulty comes in teaching those not studying such subjects, things of danger so minute that it is hard to believe that they really exist. It is true that 50 per cent or higher, if in perfect health, do escape evil results even tho the germs find an entrance. Nevertheless the only safe course is to surround ourselves with the best conditions.

As to the second point, we all know the need. What is wise to teach? There is no question of today in which there is greater need of instruction. Eighty-five per cent of our young people leave school to go into the industries, receiving no knowledge in either the home or the school upon this important topic—important because it enters most intimately into the life of every single one of these.

Let us each and every one do the best that in us lies to bring this problem to an early and satisfactory solution.

THE TEACHER'S PART IN CONSERVATION

FREDERIC BURK, PRESIDENT STATE NORMAL SCHOOL, SAN FRANCISCO, CAL.

Some time ago I undertook to say a few kind words to some young people in the act of graduating from high school. What I said to these young people was germane to the topic we now have before us. Some of what I said is as follows:

"A gaunt old gentleman in a winding-sheet and with a scythe over his left shoulder is now beckoning to us that the time has come for us to turn over to you this American earth and the reins of its government and trudge along with him. But we must first make some hasty and apologetic explanations to you. No, don't be apprehensive—you can have the reins; we've preserved them for you, but I fear their connection with the government has been cut by some gentlemen who have run off with the government end of them. And as for your inheritance of the earth I may as well be frank with you at once and admit that there is something the matter with that item also. The earth is in sight, but a few gentlemen of our generation have in some way acquired a private title to most of it and I don't think they would like to have you play upon their grass. No, we have not been playing games of chance with them. They just took your property, of which we were trustees, while we were busy pluming ourselves upon our war patriotism.

"We have always thought we were doing wonders in the matter of developing the country and so we have. Our fathers turned over to us a thinly populated region east of the Mississippi, while west of that Father of Rivers was merely wild country over which roamed antelope, prairie-dogs, Mormons, buffalo, and Lo, the poor Indian. We shot the antelope for fun, killed the buffaloes for their hides, disciplined the Mormons into more economical habits in contracting marriages, stole Lo's hunting-grounds and when he made an unseemly fuss about the matter we killed him off in various ways, humane and otherwise, until now we are proud to show you the entire country in a high state of Christian civilization. Altho we have accomplished all these wonders we must now admit that if we had been economical in the cutting of the wood and had not ruthlessly destroyed the saplings, there would now be as much timber for your use as there was when we commenced cutting. As it is, you will be out of wood in about thirty years—according to the report of the Forestry Commission.

"We dislike to go on with these embarrassing confessions, but you will learn the whole wretched story yourselves sometime and we may as well tell you. As for the coal and iron, our fathers left us enough to last for two or three thousand years if it had been economically mined according to some system established by law. We regret to tell you that we've wasted carelessly and good-humoredly what should have lasted eighteen hundred or two thousand years. The coal may hold out another two hundred years and the iron one hundred years, but both will come high in your time. We wish we did not have to mention the oil and the natural gas, but we may as well tell you that we've sucked them out of the earth almost completely and wasted them. Certain pious gentlemen, by a system of railroad rebates which we did not have the sense to prevent, drove out all competition and they are now selling the oil to us and will sell it to you at any figure they please. These gentlemen are now generously using what they can't find time to spend, in endowing colleges, churches, and in converting the foreign heathen. I will not speak of your losses of water rights, electric power, public domain, irrigable deserts, or tidewater lands; for we don't know ourselves what these losses have been. Probably nothing much that a church mouse wants is left, for we let down the bars for the corporations and never asked them even to keep tally on what they carried off.

"Dear next generation, such is part of the shameful explanation truth compels us to make to you concerning the waste and loss of your patrimony. No profligate looters of entailed estates ever robbed their posterity more liberally and merrily than we have robbed you. We've skimmed the cream and have led jolly lives—we do sincerely hope you like skimmed milk, and little of it. When you are shivering with the cold in a coalless country, when you are nursing one blade of grass to grow for you where two grew for us, when you have ceased automobiling on account of the

high price of oil, then you'll remember us in our riotous plenty. We've robbed you—you, our babes. We took the bread out of your mouths and fed it to the vultures who were fattening upon our national dishonor. Our schooling was at fault. And our sins have been the sins of ignorance, rather than of willfulness. The schools which our fathers provided for us did not teach us how in time of peace to take care of the wondrous resources they had patriotically wrested from our enemies and still more savage nature. Our schools taught us Latin and Greek, school mathematics, grammar, sailor geography, war history, and things of that kind, but never a word about the wondrous resources of our patrimony nor how to preserve it for you.

"We bequeath to you our political ideals. We are glad to be separated from them for they have ever been a source of worry to us. Our fathers in politics were a simple-minded folk. They put together a system of government which they called a democracy and very properly labeled it a government 'by the people and for the people.' We have always liked the sound of these words, but we soon discovered that to run such a government as our fathers planned, thinking was necessary—and thinking is hard. So, with our genius as inventors of ingenious machinery, we invented a political machine which does all of our thinking for us by means of wheels. Moreover, it does all the rest as well—manufactures slates for the primary, votes for us, taxes us, makes our laws, sells upon commission our public and private rights for messes of pottage and, in fact, does all the things and more, for which our simple-minded forefathers invented their cumbersome thought-power democracy. Our fathers made and left us the plans and specifications for a democracy of the people. We have made and leave to you a despotism of bosses in full operation. Our fathers' schools taught us nothing more than our schools have taught you regarding the higher ideals and the real mechanism of our political institutions. The teaching of this knowledge and tricks of practice were left to the ward club, the corner grocery, and the heelers of the street.

"In business as in politics our fathers were an extremely simple-minded folk working for what they got, and expecting to get what they worked for. But when we took the helm we promptly threw their artless and naïve notions overboard to the fishes. By a few twists of our superior intelligence—we always have been a generation of wonderful inventors—we rigged up business contrivances by which some of us got what the others of us worked for, and a few concocted a really remarkable recipe by which they capitalized millions from a simple mixture of paper and water together with the money and gullibility of the rest of us. You can perhaps imagine the consuming thirst which, under the circumstances, the rest of us have developed to possess this solution or the recipe for its making. But all we can bequeath to you is that which we have—this thirst for getting dollars we have not earned—our great national curse!

"Capital in relation to the nation is like the bunion which grew upon a small monkey's tail. The monkey finally took to his bed but the bunion grew larger and larger until it finally crowded the monkey out of bed and under the bed, taking complete possession of the downy couch. That is what the unearned wealth of this nation is doing for us. The solution of the problem is one for civil patriots. We bequeath the problem to you unsolved, for we are war patriots and our head gearing is not fitted to this kind of task. If the foe were a foreign one and should treat our nation in this uncivil way, we would trounce it into obedience to, and respect for, our flag. But the foe is an internal one—we leave the problem to you.

"We bequeath unto you our school system—in principle, just as we received it from our fathers, and they from their fathers backward thru the ringing grooves of time. We do not claim—in verity we cannot in face of manifest facts—great usefulness for it. We, as our fathers before us, have been proud of it because it was *not* useful! It has ever been an ornament to the skull. It never taught us more than a definition of patriotism, and a poor one at that. Our school system taught us dead languages exhumed from the graves of the centuries, school mathematics unknown in world workshops, peculiar types of history and geography which by dealing with useless stuff made us so silly that we never knew enough of things present to take our and your patrimony out of the rain or out of robbers' reach. We pass along to you the same school system—bulwarks of our liberties!

"Citizens of the next generation, we bequeath you a pretty mess! When we took the American earth from our fathers we had overabundance of natural resources and they threw in a lot of homely but respectable principles as trimmings.

"Your fathers were happy, devil-may-care fellows, whose courage, as war patriots, you must in justice honor, but who never had any comprehension of the meaning of a civil patriot, nor the slightest realization that it required any of the qualities of courage, self-sacrifice for the common good, and intelligence which in war patriotism we have exemplified. We could afford to be devil-may-care. But you cannot be devil-may-care, for, to start with, you can see the bottom of your dinner pails, and as for the principles, these are the same by which we have played havoc—it might be a wise precaution for you to send for the garbage man at once.

"But we leave you one bequest of value—of inestimable value if you will use it. We leave you this autograph picture of ourselves as a horrible example of the results of attempting to run a government without any instruction in civic patriotism. I once knew a boy who grew into a great and mighty man. His stock in trade was the horrible example of his father. At each crossroads in life's highway he would stop, read the signs, and then remark: 'Ah, that is the road my poor old dad took—I take the other.' If needs be, so let it be with us. Except for this horrible example we leave

you penniless, but if you read the lessons aright you will find enough negative philosophy in it to equip and run three or four governments properly. We have demonstrated incontestably that any democracy cannot be operated except by civil patriots—by men who will give as much attention, honesty, and if needs be, self-sacrifice as war patriots give. We have shown that while the phrase 'all men are created equal' may be true for the baby age, that when the men grow up they will steal the raw bones of this equality from the backs of one another unless there are enough civil patriots to hold the equality in its proper place. We have proved by the method *reductio ad absurdum* that a representative government without civil patriots to do the representing, and to be represented, is merely a lion's skin concealing the bared teeth of a hungry despotism. We have proved that we can't run a government by machinery in the place of a patriotic heart, brain, and sinew, and that machine-made government is like a machine-made egg—it lacks the germ of its species. All this and more has been demonstrated by experience time and time again; but the schools have not taught us or you this important message. Our schools have been too busy teaching us the dative case and that $a^0 = 1$, to attend to such gross, worldly matter.

"These seem simple facts and ought to be easily learned, yet this nation has spent a great deal of time, tremendous effort, a heap of money, and all your natural patrimony—and it has not learned them yet. We have been so intent in the pursuit of the dollar that we do not earn that we have not realized that we were losing a nation full of honest wealth in order to capture a few dishonest pennies. The old darkey who crawled out upon the limb of a tree in pursuit of a coon and then proceeded to saw off the limb between himself and the trunk of the tree, remarking as he did so, 'sumfin is goin' to drap,' was not seeking suicide—he was simply thinking intently of the coon.

"Most of us have learned enough about ships at sea to know that it is not the part of safety for ourselves, when we are embarking upon the voyage, to seek to have our poor relations and our political creditors, if they are ignorant of seamanship, given berths as members of the crew; we would not steal the compass even if it was set with diamonds and rubies, nor would we unhinge the compass needle even if we were short a toothpick; neither would we bore holes in the ship's bottom in search of fish bait; nor would we cut up the sails to make hammocks; and above all we would support the authority of the captain, even if the captain himself had erred, and we would suppress mutiny to the full strength of the yardarm. We would observe all these simple precautions of health, for we have some sense, and whatever expedition of pleasure or profit in which we might engage, we would realize that the bottom of the ship is all there is between us and the bottom of the sea. We would observe these precautions because we know something about ships at sea. But manifestly, we

know nothing about a ship of state because our generation, while traveling in it, has done all these idiotic things above mentioned. But you need not do them over again. One fool in the family is enough. We bequeath to you our experience in the matter, together with the unpaid bill of costs. Both are voluminous. We wish we could also leave our consciences for we should like better company in the long rest that is coming to us—consciences with as many stickers in them as ours are likely to make discomforting grave-fellows.

"I have made a most surprising discovery in the latest dictionary in the definition of 'patriot.' This most recent definition makes no mention whatever of war or fighting in connection with a patriot. It says simply that a patriot is one who loves his country and zealously supports its authority and interests.

"According to this revised version, a person would not have to be a soldier at all in order to be a patriot. Why, a congressman, a tax collector, or even a United States senator could be a patriot. We could also have lady patriots. Very few in our generation, I feel sure, ever had this notion of patriotism. From all our schools or texts have ever taught us or you, it has always seemed necessary that in order to have real patriotism we must have the roar of battle, flying shot and shell, and a drummer boy rescuing a tattered flag. But if this new definition be true, then an equally dramatic setting for patriotic tableau would be a public official with his hands in his own pockets when he could just as well have them in the public pocket; or a private citizen urging a just and fair measure for the common good when an unjust and unfair measure would benefit himself or his friends; a taxpayer rendering a true account of his taxable property; a public officer appointing a deputy for reasons of the deputy's fitness for his duties to the government rather than as a reward for questionable political services; a man or a group of men supporting laws in the interest of a square deal rather than a crooked deal in the interest of a few; a social, industrial, religious, fraternal, or racial class or organization using its influence to secure laws of justice to all classes in the nation rather than to their particular class, to the injury of the others; a newspaper appealing to the fairness of the people rather than to their rank prejudice; a man, woman, or child obeying the law of the land because it is the law, without first employing a lawyer or a dynamiter to uproot the law; a confessed thief upon the cross who does not try to prove his own innocence by filing charges of arson against the great-grandfather-in-law of the district attorney; a judge upon the bench rendering a decision upon the question of law without keeping a weather eye upon the interests of the bloated bondholders who elected him to office. Really, if we are to admit the new definition as true, I must pause in the enumeration of patriotic acts for shortage of breath.

"These deeds of civic patriotism, strangely, require more heroism than

deeds of war patriotism, for while, as our histories abundantly prove to you, practically every one of our generation could be counted upon to march up unflinchingly to the mouth of the yawning cannon in the field of battle, there are few of us indeed who have stood the test of patriotic courage demanded by these civic duties. War patriotism has been a glut upon our market in our generation, but peace patriotism has commanded famine prices. What indeed would this nation have been could we boast of our civil patriotism, in our histories, as loudly and as justly as we do of our war patriotism! What indeed would this nation have been had our schools taught us and you civic patriotism and the conservation of our natural, our civic, and our moral resources instead of the preachments of dead prophets!"

That is what I told the youth who are going out in the world to claim their patrimony. Doubtless they will not profit by it for they have not been schooled by us properly. But I do believe as a compromise measure they should teach in *their* schools for the following generation something of that generation's patrimony or what there is left of it. The chief, and perhaps only, stumbling-block in the problem of conservation is ignorance on the part of the people and the absence of a substantial civil patriotism and sound citizenship to protect the wealth of the ignorant many from the rapacity of the shrewd individual. The schools and colleges should be the chief weapons of the people by which this ignorance should be wiped out and by which true citizenship should be recruited; and what should these schools teach the youth of the land of their various heritages?

1. The schools and colleges should gather the knowledge of coal, water, metals, forests, power, and other natural resources, and this knowledge should be given unto the youth of the land even if nothing else.

2. The schools should teach the rising generation their natural rights in public utilities and should teach all that experience and wisdom have contributed regarding their control, regulation, and maintenance for common good.

3. Especially should the details of facts concerning natural resources and public utilities within their own state be taught to the students of the schools.

4. But knowledge of these facts is useless unless the state thru its citizenship is taught and trained to administer this wealth of the common weal according to the best economy and moral principles of government which experience and wisdom can develop.

Therefore, what this nation needs are schools, not more schools, but schools of a modern type—schools which shall teach the useful in living and not that which is ornamental by courtesy of hoary tradition; schools which shall teach the great problems of today and not the petty gossip of forgotten yesterdays; schools which shall minister to the living and shall not be merely monuments to the dead; schools which shall ring with the hammer strokes of the world's workshops and not echo the hollow mockeries of school pedantries; schools which shall educate and train citizens, in whose custody the health and wealth of the nation and of their children

may be trusted, and who will battle as heroically for civic ideals as our soldiers in the past have battled for war ideals.

This is what the schools should do for conservation.

REPORT OF COMMITTEE ON EFFICIENCY OF JANITOR SERVICE

The Scientific Basis For Ventilation Standards

C.-E. A. WINSLOW, ASSOCIATE PROFESSOR OF BIOLOGY, COLLEGE OF THE CITY OF NEW YORK, CURATOR OF PUBLIC HEALTH, AMERICAN MUSEUM OF NATURAL HISTORY, NEW YORK, N.Y.

The whole subject of the effect of atmospheric conditions upon health has undergone radical revision in the last ten years as a result of certain significant experiments which have been carried out in Germany and England and in the United States. It is necessary, therefore, before discussing ventilation standards to consider first what atmospheric conditions are really significant from the sanitary and hygienic standpoints.

The most obvious of all requirements for human life is, of course, that sufficient oxygen should be present to allow for the performance of the function of respiration. Human beings or other animals in a confined space gradually consume the oxygen present and replace it with oxidation products, of which carbon dioxid is the most typical. Hence it was natural that attention should be fixed primarily upon these points, and it is still the popular belief that a crowded room is deficient in oxygen. Quantitative experiments soon showed, however, that these particular dangers were not of practical importance. The victims of the Black Hole of Calcutta, and of the underground prison at Austerlitz, and the unfortunate passengers who were imprisoned beneath the hatches of the ship "Londonderry" did actually perish from oxygen starvation; and the same thing happens now and again to miners and to sewermen who venture into a clogged manhole or other confined space filled with inert gases, and are there asphyxiated. Nothing of this sort can, however, happen in an ordinary room or under normal conditions of occupancy. The oxygen in the air must be reduced from 21 per cent to 15 per cent and the carbon dioxid increased from .04 per cent to 3 per cent before any marked physiologic effect is manifest. These values are never remotely approached in what we consider an ordinary ill-ventilated room.

The next important theory that took possession of sanitarians and pseudo-sanitarians depended on the assumption that in addition to its more obvious constituents rebreathed air contained a mysterious organic emanation of a poisonous nature, which was called "crowd poison" or "morbific matter." This theory rested primarily on the observed fact that crowded rooms have a foul, stale odor and on some experiments of Brown-Sequard's which were later shown to be erroneous. It is certainly

true that to anyone entering an ill-ventilated room from purer outside air a marked and characteristic odor is apparent. This is probably due not to any organic matter discharged from the lungs but to the emanations from clothing, bodies, and teeth. It is usually not particularly noticeable to those who have been within the room during its gradual increase. There is no evidence that it exerts any harmful physiologic effects and some evidence that it does not. Careful investigations made by physiologists of the highest standing have wholly failed to demonstrate any unfavorable effects from rebreathed air with all that it contains, provided only that the temperature be kept at a proper level. Benedict and Milner observed seventeen different subjects kept for periods varying from two hours to thirteen days in a small chamber with a capacity of one hundred and eighty-nine cubic feet in which the air was changed only slowly while the temperature was kept down from outside. The amount of carbon dioxid was usually over thirty-five parts (or eight to nine times the normal) and during the daytime, when the subject was active, over one hundred parts, and at one time reached two hundred and forty parts; and all the "morbific matter" or other deleterious entities which usually accompany carbon dioxid must have been present in corresponding proportion. Yet there was no discomfort whatever, and no detectable disturbance of normal physiologic functioning as long as the chamber was kept cool. Dr. Leonard Hill has recently placed eight men in a closed chamber of one hundred and six cubic feet capacity. At the end of half an hour the wet-bulb temperature in the chamber had risen to eighty-five degrees Fahrenheit. The faces of the subjects were congested and they experienced great discomfort; but their feelings were at once relieved, without changing the air at all, by stirring it up and cooling their bodies by the motion of electric fans within the chamber.

From these experiments, and from similar ones carried out by Flügge and others, we may safely conclude that danger from the chemical constituents of ordinary rebreathed air is in the light of present knowledge so slight as to be practically negligible.

Another point, which has received more than its due share of popular attention, is the possibility of the spread of disease bacteria in air. It is common for the "yellow sanitarian," if one may coin a term, to expose plates in a schoolroom and show that a great many bacteria fall upon them, and then to call upon us all to share his horror. I have been informed that at one large New England college the member of the faculty responsible for hygiene and sanitation is accustomed to order the disinfection of any classroom which shows a count beyond a certain limit. As a matter of fact, however, the bacteria in air are in overwhelming proportion, good, harmless, saprophytic organisms. It is true that tubercle bacilli and some other pathogenic germs have occasionally been found in dust and dusty air, but rarely and in small numbers. While many disease germs are not

immediately killed by drying, we may be sure from our knowledge of the general behavior of parasitic organisms outside the body that the *percentage* reduction in living, virulent germs is rapid. From bacteriologic evidence it is clear that air bacteria must be insignificant in their effects, compared from a quantitative standpoint with the infection carried from person to person by many direct means. Dr. Chapin in his admirable book on *The Sources and Modes of Infection* has shown that clinical and epidemiological evidence points in the same direction—that the common diseases are not easily transmissible thru the air.

It is of course true that in coughing, sneezing, or loud speaking a spray of often richly infected droplets is discharged, and Dr. W. A. Evans of Chicago has drawn a moving picture of the danger from an incipient sick person, who runs for a car and just makes the crowded back platform, puffing and coughing in the faces of his neighbors. This is dangerous enough but it is not air infection. The mouth spray is a local rain which drops quickly to the ground, not a general pollution of the atmosphere. It could not be detected by any analytical methods, and could not be remedied by ventilation. It is a kind of direct contact rather than a problem of air pollution.

The really important factors which make for health or disease in the atmosphere are physical rather than chemical or bacteriological. From this standpoint the effect upon the vitality is great, not only of the air we breathe, but of the air which surrounds our bodies. Mr. R. W. Gilbert of the Massachusetts Institute of Technology begins a suggestive article on "The Economics of Factory Ventilation," in the *Engineering Magazine* for December last, as follows:

> Webster's definition of the word "ventilation" is "to air," or "to replace foul air by fresh." In actual practice, however, ventilation should mean more than this. It should mean the conditioning of the air of any inclosed space to the best requirements of the occupants of that space.

It is not the quantity of air or even the quantity of "fresh" air that is important; it is the physical quality of the air in its relation to the human body that is significant. Our ideal must be the conditioning of the air so that the human machine may operate at the highest level of health and efficiency.

The chief factors in air conditioning for the living machine, which in most cases far outweigh all others put together, are the temperature and the humidity of the air. It is a curious instance of the way in which we neglect the obvious, practical things and attend to the remote and theoretical ones, that for years more attention has been bestowed on the testing of air for carbon dioxid, which was supposed to indicate some mysterious danger, than on the actual, concrete effects of overheating. Yet heat, and particularly heat combined with excessive humidity, is the one condition in air that has been proved beyond a doubt to be universally a cause of

discomfort, inefficiency, and disease. Flügge and his pupils in Germany, and Haldane in England,[1] have shown that when the temperature rises to eighty degrees with moderate humidity or much above seventy degrees with high humidity, depression, headache, dizziness, and the other symptoms associated with badly ventilated rooms begin to manifest themselves. At seventy-eight degrees with saturated air, Haldane found that the temperature of the body itself began to rise. The wonderful heat-regulating mechanism, which enables us to adjust ourselves to our environment, had broken down, and an actual state of fever had set in. Overheating and excess of moisture is the very worst condition existing in the atmosphere and the very commonest. We all know the difference between our own sensations on a cool, brisk October morning and on a close, muggy dog-day in August, and this feeling of discomfort is an accurate measure of the physiological damage which our organism suffers under such conditions. Yet Dr. Helen C. Putnam reported at your meeting a year ago that in six hundred schoolrooms in various cities she found only two hundred and ten thermometers; that one-third of these were out of order; and that of the remainder, only twenty were below seventy-two degrees, the rest ranging from seventy-two degrees to eighty-five degrees in the winter months. It may be seriously questioned whether the schooling of the children in these rooms was not too dearly bought at the expense of the physical harm they suffered.

Excessive humidity in the air works harm in two ways. At a temperature above seventy degrees the body must rely largely on evaporation of the water of perspiration for maintaining its normal temperature. Professor Theodore Hough, of the University of Virginia, described the resulting phenomena very clearly and concisely in the *American Journal of Public Hygiene* for May, 1910, in the following passage:

> So long as this perspiration can evaporate readily, there is little difficulty in keeping output equal to production. When, however, owing to high humidity evaporation is lessened, blood is rushed in larger quantities to the skin at the expense of the flow to other organs; the temperature of the skin is raised and so heat transfer by radiation, conduction, and convection is facilitated. The normal temperature of the body is approximately maintained; but it is at the expense of the working efficiency of other organs and especially that of the brain.
>
> Between the circulation in the skin and that in the brain, there is a very close correlation; one is generally, if not always, secured at the expense of the other. Thus sleep is accompanied by increased cutaneous circulation; waking is preceded by a sudden, marked cutaneous constriction. Mental work, especially that involving interest and attention, is accompanied by still further limitation of the flow of the blood to the skin. Conversely, whenever the cutaneous vessels are made to dilate, as on the warm, muggy day, the quantity of blood flowing through the brain is lessened. In these facts we probably find the true explanation of the dull, heavy feeling, the difficulty of attention, and the discomfort both of the muggy, summer day and of the crowded, ill-ventilated room. It is not impossible, too, that the unfavorable circulatory conditions in other organs as well

[1] The literature on this subject is well summarized with references to original sources, by T. R. Crowder, in "A Study of the Ventilation of Sleeping-Cars," *Archives of Internal Medicine*, VII, 85.

as the disagreeable sensation of an overheated skin contribute to the interference with working-power.

I would, therefore, conclude that the most important if not the sole cause of the acute effects of poor ventilation is the combination of high temperature and high humidity which then obtains. It is neither of these acting alone but the two working together which introduce into the system the unfavorable circulatory conditions we have described.

If the temperature be below sixty-eight degrees, on the other hand, an excess of moisture may exert deleterious effects of a precisely opposite kind. Under these conditions the body tends to cool too rapidly rather than too slowly, and the secretion of perspiration ceases. The moisture in the air no longer has any heating effect but, on the other hand, its presence raises the specific heat of the atmosphere, increases the amount of heat a given volume of air will take up from the body by conduction or convection, and thus directly exerts a cooling influence on the body. We have thus the somewhat paradoxical condition that excessive atmospheric moisture increases the bad effect of either heat or cold.

On the other hand, an atmosphere which contains too little moisture is also undesirable. We have very little sound scientific knowledge about the physiological effect of dry air and much that is written by extremists on the subject is without solid basis. Many persons can, however, testify to the discomfort they experience in steam-heated rooms and it is probable, as Professor Hough has elsewhere stated, that

this is due to the too rapid evaporation of water from the skin and air passages. The skin thereby becomes dry and tends to chap, cutaneous nerves are irritated in an unpleasant manner, with more or less disturbance of affairs in the central nervous system. Especially the drying of the conjunctival and sclerotic seems to be a matter of considerable importance. I suppose, too, that when the skin dries too quickly there is greater tendency to the deposition of the solids of perspiration in the ducts of the sweat glands. These ducts are not flushed out as they should be.

Finally, dust particles in the air have a distinct and well-established physiological significance, not as possible carriers of disease germs, but from their direct physical effect upon the tissues of the eye and nose and throat. The normal membranes of the body are usually able to defend themselves against invading microbes, but when lacerated and injured by sharp dust particles, tubercle bacilli which are latent in many lungs and the germs of minor diseases and inflammations which are present in all normal throats quickly gain the upper hand. The statistics of tuberculosis in various industries offer the clearest evidence of this, for in the trades like grinding and granite-cutting where the workers are exposed to large quantities of dust, the tuberculosis death-rate may be four or five times the normal. Physicians have often testified, tho without definite statistical evidence, to the relation between dust storms and diseases of the eye and naso-pharynx and to the beneficial effect of oiling the streets and preventing the dust from flying. There can be little doubt that the dust in the air of a schoolroom may exercise a considerably harmful effect, particularly when a class

is ordered to breath deeply just after filling the air with clouds of it in the course of their calisthenics.

The most important observation which should be made at frequent intervals in regard to the atmospheric conditions of a schoolroom is obviously the determination of temperature and humidity. For temperature the ideal instrument is a recording thermometer which gives a complete record of atmospheric conditions. For the ordinary school, however, this would be too costly and we must usually be content with thermometers of the ordinary pattern. It should be an absolute essential, however, that every schoolroom should have at least one thermometer and that it should be standardized and compared at intervals with an accurate instrument to see that it is in good, working order.

Humidity is best determined by the use of a wet and dry bulb thermometer, an instrument which depends on the principle that the depression of temperature on the wet bulb thermometer as a result of its cooling by evaporation is proportional to the humidity of the air. The form of wet and dry bulb thermometer recommended by the Committee of the American Public Health Association on Standard Methods for the Examination of Air (*American Journal of Public Hygiene*, XX, 346) is the Sling Psychrometer employed by the United States Weather Bureau. It consists of two mercurial thermometers, fastened upon an aluminum back, and mounted on a handle by which it can be whirled. This instrument may be obtained from Schneider Brothers, of New York City, or from Queen and Co., of Philadelphia, and full directions for its use will be found in *Bulletin No. 235* of the United States Weather Bureau. Stationary wet and dry bulb thermometers mounted on a solid backing are unreliable on account of their lag and the likelihood that the wet bulb will not be properly moistened and ventilated.

For the determination of dust two methods are recommended by the Committee on Standard Methods. When the dust is not very abundant the koniscope, an instrument invented by Professor Aitken, of Glasgow, may be used. It consists of two brass tubes connected with a small air-pump. By exhausting the air from one of the tubes, allowing the space to become saturated with water vapor by evaporation from wet blotting-paper within, and then allowing the moisture to condense upon the dusty atmosphere under examination, clouds of different degrees of density are formed inside the tube, and the approximate number of dust particles can be calculated from the density of the cloud. Where dust is present in considerable quantities it can be determined by filtering a measured quantity of air thru a filter of granulated sugar, dissolving the sugar and suspending the dust in a known volume of distilled water, and either weighing the dust in a Gooch crucible or counting the number of particles in an aliquot portion under the microscope. The sugar should have grains between twenty-five hundredths of a millimeter and one millimeter in diameter

and the filtering layer should be one centimeter deep. It may be held conveniently in place in a glass tube of one- or two-centimeter bore by a perforated stopper and square of bolting-cloth. A suction cylinder of metal with a closely fitting piston or a Roots blower arranged to operate on the suction principle should be used for collecting the sample.

It might be thought from what has been said above that the determination of carbon dioxid could be entirely dispensed with, and some school hygienists have taken that position. Personally, I am not prepared to grant that under actual conditions of occupancy no change of air is necessary, even if the temperature be kept down. It may be granted that in the laboratory rebreathed air has not been shown to be harmful when the effects of heat and humidity are eliminated. Under the practical conditions of the schoolroom, however, it is generally true that with stale air, carbon dioxid and heat and humidity and odors, all increase progressively, tho of course not all necessarily in the same ratio. The practical method of dealing with all these conditions is to change the air; and the change has an effect upon comfort which cannot be measured by a thermometer. Where there are no air currents the hot, moist, vitiated air from the body clings round us like an "aerial blanket," as Professor Sedgwick has named it, and each individual is surrounded by a zone of concentrated discomfort. The delightful sensation of walking or riding against a wind is largely due, perhaps, to the dispersion of this foul envelope, and Professor Hill's experiment with the fan in his closed chamber shows how striking this effect may be. Under working conditions (except where electric fans are used in summer) it is the slow or rapid entrance of fresh air from without that breaks up this blanket of foul air. Change of air is therefore practically necessary and carbon dioxid is a useful indicator of the extent to which such change has occurred. Its determination should not take the place of direct observations of temperature and humidity which are the primary tests; but as a supplementary test, used along with them, it is most instructive.

For the determination of carbon dioxid, with the approximate accuracy which is amply sufficient for ordinary sanitary purposes, the time method of Cohen and Appleyard is the most convenient. It is fully described in the Report of the Committee on Standard Methods to which reference has been made, but its essential features are as follows: Samples are collected by the use of a pair of bottles connected by a siphon, the one in which the sample is to be collected being filled with water. Ten cubic centimeters of a dilute solution of lime water tinted with phenolphthalein is run into the bottle of air after collection, and vigorously shaken until the color disappears. From the time required for decolorizing, the amount of carbon dioxid may be calculated.

All the determinations recommended are simple and require comparatively inexpensive apparatus. There is no reason why every room should

not have its ordinary thermometer and every school its equipment for the determination of humidity, dust, and carbon dioxid, which might be in the hands of the teacher of physics or chemistry, or nature-study, or hygiene.

It has required a somewhat extended discussion to present the scientific basis for ventilation standards and when we come at last to the consideration of the standards themselves it is impossible to speak with very great definiteness. Extended studies of actual conditions in relation to their effect upon physical and mental efficiency can alone furnish a sound basis for such standards as we should like to possess. At present almost no such studies have been made under conditions of scientific control which warrant their acceptance. If members of the National Education Association would co-operate with trained sanitarians and physiologists and psychologists in carrying on such investigations, they would, I believe, render a notable service to science and to education. At present only a few salient points can be tentatively established.

In regard to temperature there is one standard which can be fixed with confidence. It is, I think, quite certain that the temperature of the ordinary thermometer should never under any circumstances be permitted to pass seventy degrees Fahrenheit. The statistics quoted above from Dr. Putnam's study show how much even this simple rule is needed. The lower limit for persons with ordinary light clothing should probably be placed at sixty-six degrees, for just below this point, as Sedgwick and Hough have emphasized, there is a likelihood of gradual and unnoticed chilling of a dangerous kind.

In regard to humidity it is not possible to speak with the same certainty in the light of present knowledge. If the temperature be maintained between sixty-six and seventy degrees a relative humidity of about 70 per cent may be considered as a maximum beyond which it is undesirable to go. A lower limit may perhaps be tentatively set at 60 per cent altho it is not at all certain that the range might not be safely extended to 50 per cent at the lower and 75 per cent at the upper end of the range. Only a study of actual schoolroom conditions in their relation to health and comfort and efficiency can settle these points satisfactorily.

A standard for permissible dustiness is quite beyond the present range of our knowledge. Dr. Soper, in the studies made in connection with the New York subway, found fifty-two milligrams of dust per one thousand cubic feet of air as an average for the street air of New York. In the air of cordage factories, I have found over five thousand milligrams in the same volume, and Dr. Graham-Rogers found nine thousand six hundred milligrams in the air of certain rooms where pearl-button working was going on. If more than fifty milligrams of dust are found per one thousand cubic feet of air, the condition is worse than that which obtains in the streets of New York, and there is no reason why an inclosed room should not be kept freer from dust than the air of a city street.

The standard for carbon dioxid should be made a fairly liberal one, in view of the fact that it is to be used not as an index of any mysterious poison, but simply as a measure of air change. Taking the normal for city air at .04 per cent it seems reasonable to allow an increase to .12 per cent, or three times the normal. This is the standard suggested in recent English reports for several classes of factories and established for the garment shops of New York by the Joint Board of Sanitary Control in the Cloak, Suit, and Skirt Industry. It means an allowance of seven hundred cubic feet of air per person per hour, about one-fourth of what is required by ordinary mechanical standards of ventilation, so that it certainly cannot be considered excessive. On the other hand, in the light of all recent evidence, I cannot see that we have the right to insist on more than this, provided that the temperature and humidity be adequately controlled. It is proper to require that air shall be changed at least once an hour, which is about what this amounts to, but chief emphasis must be laid not on the quantity of air but on its physical condition.

There is one point which may perhaps be emphasized in closing, altho it is not a question of standards. That is the importance of "perflation" or the complete flushing-out of a room at intervals with vigorous drafts of fresh, cool air. The gradual air change accomplished by ventilation is not nearly so effective from the physiological standpoint as the opening of windows for five minutes. A gale of wind not only brings general coolness but it breaks up the aerial blanket and gives a new mental tone to mind and body which can be attained in no other way. A five-minute period set aside every two hours for such a flushing-out of the schoolroom can hardly fail to bring a good return in the mental effectiveness of the pupils.

BACTERIOLOGICAL TESTS OF METHODS OF CLEANING

W. D. FROST AND MISS V. A. ARMSTRONG, DEPARTMENT OF BACTERIOLOGY, UNIVERSITY OF WISCONSIN, MADISON, WIS.

USUAL METHODS

Air analysis.—Practically no work has been done, so far as the authors are aware, on bacteriological tests of methods of cleaning, altho, of course, determinations of the number of bacteria which such methods add to the air over and above the normal have frequently been made.

Bacteriological air examinations have been common since the work of Koch, who introduced a comparative method for analysis.

This method is too well known to need description. It gives comparative and not absolute values, but offers a ready means of determining the relative number of bacteria in one place, compared with another, or under different conditions. The air of the open is usually considered as the normal.

The quantitative methods of air analysis are long and usually unsatisfactory, altho it is possible to obtain quite accurate results.

These methods of air analysis are of value, and while it is important to know how many bacteria there are in the air, and the kinds, it is just as important to know the number and kinds of bacteria which are on the floor, walls, and furniture of a room, since the bacteria in these places may readily and at almost any time get into the air.

ADHESIVE-DISK METHOD

A method is here proposed for determining the number of bacteria on various surfaces. It is believed that determinations of this kind are fundamental to any discussion of the various methods of cleaning.

In determining the value of any method of cleaning, what we really want to know is the proportion of dust and bacteria removed from the room by the cleaning process.

This is a difficult matter to test bacteriologically, and one which, so far as the writers know, has not been attempted before. None of the ordinary methods of bacteriological analysis are applicable. It seemed necessary, therefore, to devise a method. The problem, as it appeared to us, was to determine the number of bacteria on a given surface of floor or furniture, clean it, and then determine the number of bacteria left. In this way it would be possible to determine the cleaning efficiency of a method measured in terms of microbes removed.

The first method that suggested itself was to wipe a measured area of the surface to be cleaned with a sterile cotton swab moistened in sterile water, the cotton swab to be put into a flask of sterile water, used as the diluting medium. This idea was put into action and definite areas were marked out on the floor and the method tried out. Not just one swab was used but a number consecutively until all of the dirt appeared to be taken up. It was found impossible, however, to arrive at any definite conclusion as to the number of bacteria present, because of variations in different trials which apparently could not be overcome. While working at this problem one of the writers had occasion to use some surgeon's adhesive tape and this suggested the idea that the principle involved here might be made use of in removing bacteria. Various adhesives were tried. The method which was finally agreed upon is as follows:[1]

Method of using.—Disks of cheesecloth about four inches in diameter are saturated with a 20 per cent solution of gelatin. When these have hardened they can be pressed against the surface to be studied. When they are removed they bring the bacteria with them. They are then dissolved in slightly warmed water. All this is done in an asceptic manner so that all of the bacteria in the water come from the particular area under test. The number of bacteria in the water are easily determined by the ordinary plate cultures.

[1] A detailed description of the technique is to appear in the *Journal of Infectious Diseases* (Chicago, Ill.).

Accuracy.—In order to prove that these adhesive discs take up the greater part of the bacteria when they are removed from the surface on which they have been placed, several discs were consecutively applied to the same area. In this way it was shown that these discs removed practically 99 per cent of the bacteria on the surface.

TESTS ON DIFFERENT METHODS

Dirty floor.—A study of the bacteria on a small area of a rather dirty laboratory floor showed 11,850 bacteria per sq. cm. In another place, the garret stairs of a dormitory, curiously enough almost exactly the same number were found, i.e., 11,820. As an average of a number of trials in an ordinary room, 1,166 were found. At another time, on a stairway which had recently been cleaned, 68 bacteria were found as an average of a number of tests. In a recitation room 331 bacteria were found as an average of six tests, and 91 as an average of two tests in another room. In an exceptionally clean house, where a vacuum cleaner had been used for some months, an average of two different tests showed 84 bacteria per sq. cm.

Dry cloth.—When a dirty floor was cleaned by rubbing it with a dry cloth it was found that there were left 160 bacteria per sq. cm.; while in a closely contiguous area 11,850 bacteria were found per sq. cm.

Hot water.—When another adjacent area was washed with a rag rinsed from very hot water, the number of bacteria left per sq. cm. was 17.

Disinfectants.—Near this, another area of the floor was washed with mercuric chlorid (1/1000), rinsed in sterile water and then covered with a bell jar to prevent the bacteria of the air from falling upon it while it was drying. This area was found to have from 0 to 4 bacteria per sq. cm.

Dry Broom.—In order to test the effect of cleaning by an ordinary broom, a moderately clean floor was selected, the number of bacteria was determined per sq. cm., and then the floor was swept in the ordinary way and the number of bacteria per sq. cm. remaining was determined. The results obtained are shown in the following table:

TABLE I

CLEANING EFFICIENCY OF AN ORDINARY BROOM
(BACTERIA PER SQUARE CENTIMETER)

Experiment	Number of Bacteria Found on Floor	Number of Bacteria After Sweeping	Percentage of Bacteria Taken up in Sweeping
1	73	9	—
2	48	5	—
3	28	3	—
4	90	39	—
Average	60	14	77

It will be seen from this table that a considerable number of bacteria are removed, but it is undoubtedly true that a large portion of these go

into the air only to settle again, so that in order to get at the value of cleaning by this process it would be necessary to take this fact into consideration. From some experiments which were done in another connection, it would seem that the number of bacteria which were in the air after sweeping, over and above those ordinarily present, were such that seven bacteria were falling each sq. cm. per hour, so that it would not be long before the floor had nearly as many bacteria as before sweeping by this method if the room were tightly closed.

Oil Broom.—This is a bristle broom with a reservoir above for holding oil. This oil trickles down thru the center bristles sufficiently to keep the bristles moist. In using the broom the dust is rolled up into little balls and largely prevented from getting into the air. If such a broom is tested by determining the number of bacteria in the air before and after sweeping the results are quite satisfactory, but the point we were trying to determine here was the condition in which the floor was left, and the results obtained are shown in the following table:

TABLE II

TESTS MADE WITH A PATENT OIL BROOM
(BACTERIA PER SQUARE CENTIMETER)

Experiment	Number of Bacteria Found on Floor	Number of Bacteria After Cleaning	Percentage of Bacteria Taken up in Cleaning
1	620	380	—
2	1,008	541	—
3	363	595	—
Average	660	505	23
4	8,900	4,450	—
5	6,500	8,600	—
6	26,600	16,000	—
7	19,500	15,300	—
Average	17,875	11,087	37
8	4	23	—
9	4	13	—
10	3	18	—
Average	4	18	450 increase

This table shows that under certain conditions as much as 37 per cent of the bacteria can be removed from the floor by this broom; that this broom, on the other hand, may actually increase the number is the interesting fact brought our in Experiments 8 to 10 in this table. In this case there was a 450 per cent increase. The broom tested was one that had been used several times, and an effort was made to clean it thoroly before using. This seems a difficult if not impossible task. The increase was due to the number of bacteria which, in spite of cleaning, still remained in the broom.

Sweeping compound.—The sweeping compound used in this experiment was a patented product, crystalline in nature, and is sprinkled on the floor or put in a reservoir on the broom to be swept ahead of the broom. The following table shows the results which were obtained and hardly bears out the statement on the package in large letters "It kills the germs and sterilizes your rooms."

TABLE II A

TESTS MADE WITH SWEEPING COMPOUND AND BROOM
(BACTERIA PER SQUARE CENTIMETER)

Experiment	Bacteria Found on the Floor	Number of Bacteria After Cleaning	Percentage of Bacteria Taken up in Cleaning
1	448	126	—
2	936	1,084	—
3	442	398	—
Average	608	536	28

Vacuum cleaners.—When the vacuum-cleaning system was introduced a few years ago, it was quite generally believed that the sanitary cleaning of buildings could be readily accomplished. But in the last few years there have been many different makes put on the market, which vary so greatly in their mechanical efficiency that it would seem desirable to have some criterion for judging of their efficiency from a sanitary standpoint. If they differ greatly in mechanical efficiency they must also differ in cleaning power, and it was our purpose to test some of them. We have chosen two permanent systems, one in which the vacuum is produced by an electric fan, and the other by means of a steam aspirator. Of the portable types eight have been tested, three where the vacuum is produced by rapidly revolving fans, two by bellows electrically driven, and two worked by hand.

Both of the permanent systems studied proved satisfactory from a sanitary standpoint, altho their efficiency varied somewhat. One removed 95 per cent from the floor and the other 79 per cent. Of the portable types several proved quite efficient, since the different types removed 82 per cent, 77 per cent, and 57 per cent respectively, due to variations in motive power, manner of construction, shape, size of brushes, etc.

In the permanently installed systems bacteria in the dirt are taken out of the rooms entirely, and if the discharge pipe is properly located the bacteria removed are of no concern. In the portables, however, the condition is very different. All the portables examined so far have discharged the air directly into the room. In some of them the air has been filtered or strained thru a bag, in others the dust and bacteria are retained by a series of baffles. It is very evident upon consideration that it is ordinarily quite impossible to keep the bacteria from getting back into the room. In

some of the machines examined the bacteria pass thru very readily, in others it is with greater difficulty, apparently, that their passage is accomplished. The testing of this point has been carried out by means of placing culture plates in front of the discharge pipe. And also by sucking dirt containing *B. prodigiosus* into the machine and then determining whether or not it escapes from the machine, and if so, the distance to which it is thrown.

The results of one experiment along this line may be cited which shows that the bacteria are discharged into the room in considerable numbers and that some of them are actually thrown to a distance of six feet. It has been demonstrated that *B. prodigiosus* may be carried from one room and distributed about another by means of these portable cleaners.

And so while it is true that these machines are able to take up the dirt and bacteria in varying degrees of perfection, it is also true that they allow the escape of the bacteria contained in the dirt, and hence they may be an actual menace to health. It is possible to obtain abundant data to warrant health officers forbidding the use of these machines by traveling cleaners, since it must be every evident that if *B. prodigiosus* can be carried from one room to another, *B. tuberculosis* could be carried from one house to another.

OUR SHORT COURSE FOR JANITORS

W. D. FROST, UNIVERSITY OF WISCONSIN, MADISON, WIS.

The physical development of the child is quite as important as the mental development. In order to secure proper progress in the latter direction, a carefully selected, thoroly trained body of teachers is employed.

Physical development depends on environmental conditions. Euthenics is the handmaid of eugenics. We admit these facts and yet too often allow or select persons of mediocre ability with little or no special training and usually with absolutely no real knowledge of fundamental facts to control the child's physical environment.

The janitor is of necessity an important factor in controlling, not only the comfort, but the health of the occupants of any building, and this is true especially of schools. It will be quite impossible immediately to supplant the present janitors; it might be possible, however, to educate them. In this way it will be possible to create an interest in them for health matters which does not now exist.

Because of ignorance, people as a rule are not interested in matters of hygiene, but few people are so lacking in human interest that they will not do all in their power when they really understand their responsibility.

It is in this spirit that the matter has been approached at the University of Wisconsin. So far the course outlined below has been pre-

sented to the janitors of a single building, that in which the Department of Bacteriology and Hygiene is housed.

Arrangements have been made, however, by which all of the force will receive instruction this next year.

Everyone who is responsible for the care of a public building ought to know certain fundamental facts about hygiene, such as the principles of ventilation, heating, and air moisture; the dangers from impure water, and the common drinking-cup; the science and art of cleaning, which would include some knowledge of what dust is and its effects on the human system when inhaled; what air-borne diseases are and their importance; and the methods of cleaning, so as to remove dust and bacteria without contaminating the air.

The janitor ought also to have enough knowledge of the essentials of plumbing to enable him to take proper care of the closets and traps and to recognize errors in construction, as well as leaks or injuries; in small places where there is no general sewerage system, the principles of sewerage disposal ought to be understood. The principles of disinfection and the nature and reliability of certain chemicals should be made a part of his equipment, and this is especially true of deodorants, so-called, which are so frequently used to mask one odor by making another quite as dangerous, since it gives a false idea of security or cleanliness. In certain buildings attended by adults the janitor will need to know of the dangers of spit, the means of preventing, and the kinds and care of spittoons. Such a course as this is outlined below. It should not be technical, can be presented in a comparatively few lectures, and will prove interesting to the average janitor, and profitable.

Diagrams, pictures, and models will be of great service both to the janitor and the instructor. In regard to the models, attention may be called to one illustrating plumbing, in which in the space of a few feet a two-story building is completely outfitted showing proper location of various fixtures, soil-pipe, grease-trap, back-vents, etc. Working models of a continuous sand-filter for a water-supply and of a septic tank and contact-beds are also appreciated. The use of certain instruments such as the recording thermometer, the hygrometer, and the anemometer ought to be taught.

If such a simple course as this could be given to the janitors of our schools, there is reason to believe that much interest would be awakened in the matter of the proper care of children in the schoolrooms and that the actual conditions therein might be much improved.

LECTURES ON HYGIENE FOR JANITORS

Janitors of all public buildings ought to be acquainted with the matters suggested in the following outline:

Ventilation—
- The composition of the air.
- The relative importance of the various components from a hygienic standpoint, including the amount of air required, per head, per hour, etc., etc.
- Natural methods of ventilation, including the principles of air movement.
- Mechanical methods of ventilation.
- General principles.
- Various systems.
- Independence of heating and ventilating systems.
- The effect of bad air on health, and the importance of pure air in maintaining the health tone.

Heating—
- The necessity for heat.
- The amount required.
- The systems of heating and advantages of each.
- The effect of insufficient heat on health.
- The effect of too hot rooms on health.
- The effect of wide fluctuations on health.

Moisture in the Air—
- Moisture in normal air.
- Moisture in air of heated rooms.
- Effect on health.
- Methods of testing and modifying humidity.

Water—
- Dangers from impure water.
- Dangers from common drinking-water.
- Principles and types of sanitary fountains.

Cleaning—
- Dust and its dangers.
- Composition.
- Effect on the system.
- Air-borne diseases.
- Methods of cleaning.
- Dry sweeping and dusting.
- Use of dust-layers and dustcloths.
- Vacuum cleaner.
- Methods and frequency of washing floors and woodwork.

Plumbing—
- Elementary principles.
- Care of traps and closets.
- Periodic inspection.

Disinfectants—
- General principles.
- Liquid disinfectants.
- Gaseous disinfectants.
- Deodorants.

Spitting—
- Dangers from spitting.
- Necessity of preventing.

Spittoons—
- Forms.
- Care.

DEPARTMENT OF SCHOOL ADMINISTRATION

SECRETARY'S MINUTES

OFFICERS

President—Linnaeus N. Hines, superintendent of schools.....Crawfordsville, Ind.
Vice-President—Willard S. Small, principal, Eastern High School .....Washington, D.C.
Secretary—William George Bruce, editor, *American School Board Journal*....Milwaukee, Wis.

FIRST SESSION—Wednesday Forenoon, July 12, 1911

The meeting was called to order in Golden Gate Doric Hall by the president, Linnaeus N. Hines, superintendent of schools, Crawfordsville, Ind.

In the absence of the secretary, Frank M. Bruce acted as secretary *pro tempore.*

The order of business was reversed by the presiding officer and the Committee on Nominations was appointed, as follows:

C. F. Philbrook, superintendent of schools, Bisbee, Ariz.
G. B. MacGillivray, supervising principal, Los Angeles, Cal.
E. S. Monroe, superintendent of schools, Muskogee, Okla.

Papers were then read by Linnaeus N. Hines, superintendent of schools, Crawfordsville, Ind., on "The Ideal School Board from the Superintendent's Point of View"; by Will A. Myers, superintendent of schools, Hartford City, Ind., on "The Relation of Indiana's Accounting Board to Public Schools"; and by Richard Welling, chairman of the School Citizens' Committee, New York City, on "Pupil Self-Government as a Training for Citizenship."

SECOND SESSION—Thursday Forenoon, July 13, 1911

The second meeting of the department was called to order at 9:30 A.M. with the president in the chair.

Normand S. Patton, formerly architect of the Board of Education, Chicago, Ill., read a paper on "The Present-Day Tendencies in School Architecture."

This was followed by a long discussion.

The report of the Committee on Nominations was then presented, as follows:

We, your Committee on Nomination of Officers for the ensuing year, respectfully report as follows:

For *President*—W. A. Wirt, superintendent of schools, Gary, Ind.
For *Vice-President*—Harlan Updegraff, specialist in school administration, Bureau of Education, Washington, D.C.
For *Secretary*—William George Bruce, editor, *American School Board Journal*, Milwaukee, Wis.

The report of the Committee on Nominations was unanimously adopted, and the meeting then adjourned.

Frank M. Bruce, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE IDEAL SCHOOL BOARD FROM THE SUPERINTENDENT'S POINT OF VIEW

LINNAEUS NEAL HINES, SUPERINTENDENT OF SCHOOLS, CRAWFORDSVILLE, IND.

The organization of the average school board or school committee presents many problems. These problems arise largely because men inexperienced in school affairs are put in positions of authority on school boards and then proceed to direct their schools according to their inexperience. There is no better opportunity in any community for fine and enduring work than that furnished by conscientious service on the school committee. The school board has a great work to perform, for thru it the community makes known its wants in the school line. In fact, every school system that has a live, progressive board at the head of its affairs is fortunate indeed. The school expert, as every superintendent ought to be, sometimes tends to look on only one side of a question that affects his community in a large way. Thinking of only his one line of work, he may not see all the angles at which his activities may touch the public with which he is laboring. A school board composed of sane, wide-awake business men can be of immense service in correcting any mistakes of judgment the superintendent may make, or in pointing out the errors in policies he may propose. They can in all business matters be of inestimable value in weighing and deciding what ought to be done. The superintendent that has such a board can count himself fortunate above all things. If he is the sort of a superintendent he ought to be, he will seek gladly all the advice he can get from the broad-minded board members with whom he is associated.

The present-day tendencies in all parts of the United States where there is any school progress at all are toward school boards with small memberships. Small boards tend to work thru salaried experts rather than thru board committees, as is done in hundreds of school corporations where large boards exist. Even in the largest cities boards should not exceed five or perhaps seven in number. Five men of the right type in any city in this country can transact all the school board's business and do it better than it is done in hundreds of places where there are large boards elected by wards or otherwise and where each member tries to see to it that his section of the city gets the best of it and that his political party is not forgotten in appointing teachers and janitors. With small boards responsibility can be more easily fixed. There is not so much chance for one member claiming that some other member is responsible for certain objectionable school activities or legislation. The small board must stand squarely up to its business and assume all responsibility for its acts.

Factions in large boards are better able to shift responsibilities, becloud issues, and make nuisances of themselves generally. Small boards, composed of the highest type of business and professional men, and depending on a corps of salaried experts sufficiently large to do all their school work well, can get the best results in practically all school corporations. Small boards come to depend on their superintendents and their assistants. Such a board can and should act in a critical capacity as to whether the superintendent is getting proper results. The members should be ready to help him by advice and otherwise and then, if he fails, they should tell him so and look elsewhere for a man to take charge of their schools. No superintendent should offer excuses for failing when he has had the proper help and advice from his board, but no cause will lead to a superintendent's failure more quickly than lack of co-operation on the part of his school board. The large board is less likely to understand or appreciate what the superintendent is trying to do. He is less likely to get the co-operation and sympathy that he needs in the trying work of his position. In fact, the large board is in every way inferior to the small board under all ordinary circumstances.

The writer of this paper had some business transactions at one time with the school board in an Illinois city of some twenty-five thousand people. There were thirteen members on this board, the thirteenth man acting as president and voting in case of a tie. The board was divided up into so many committees that each man had to serve on two or three different committees. There was a committee on teachers, another on janitors, one on schoolroom lighting, one on sanitary conditions generally, etc. The whole situation was ridiculous and pathetic. The writer became especially interested in that school-board situation. He made some investigation. So far as he could find out, not one of those men had any special fitness to do the committee work assigned to him, yet each committee took itself seriously, went thru its assigned motions, and was jealous of any interference or dictation. A shop foreman, a manufacturer, a retired capitalist, a publisher of a religious paper, a commission man, an extremely busy lawyer, and a few others of scattered occupations composed this austere assemblage of scholastic inefficiency. All of these men were upright citizens and successful in their lines of work. The only trouble was that they thought they knew something about their schools when the truth was that they knew little or nothing. In place of posing as experts, they should have turned over all their committee activities to salaried experts and then set themselves up as fair-minded judges of results, which was their sole function under the circumstances.

The ridiculous features of such a situation can be best brought out by making a comparison. Suppose that the board of directors of some big hospital should decide to take upon itselt the same relative functions that are assumed by a large number of school boards thruout the country.

The hospital board would divide itself up into committees, the function of each of which would be to take charge of some phase of the actual work in the wards and the operating-rooms. One committee would see to the lighting of the rooms, another would attend to the ventilation, another would employ the doctors and nurses, another would have charge of the administering of anæsthetics, another would look after the surgical instruments, etc., *ad nauseam*. Could anything more ridiculous be imagined than such committees, composed of men with no fitness and no training, administering to the needs of the sick and dying? It may be answered that such a situation is a different matter, that no one would be foolish enough to think of conducting a hospital in such a manner and that no doctor that knows anything or has any self-respect would work in such a hospital as that. To my mind, it is about time for the general public to come to the conclusion that directing the public schools is also a different matter. Living, growing human beings, with their lives to be made or unmade largely by the schools, need expert direction, unhampered by all sorts of officious meddling by people that know little of the schools of today and their needs. The ideal school board does not seek to take immediate direction of every activity of the schools under its control.

A matter that has an important bearing on the character of men that are elected for membership on a school board is the amount of salary that each member receives. If the salaries are small, the men selected are likely to be of a much higher type than if the salaries are large enough to attract men of small caliber, who want the money they can get out of school-board service rather than want to serve their communities in the splendid way that is offered to every high-minded, broad-minded board member. The ideal school board is likely to be composed of men serving for small salaries.

The ideal board is usually composed of men appointed at large and not elected by the people directly. Board members should never be selected to represent certain districts or wards. Each member should be appointed to serve the whole people of his community and not any particular section. A man from the seventh ward or the fifteenth ward on a school board is inclined to remember the needs of his own district as against the needs of the whole school city. A board member appointed from a particular ward will likely be just about the size of his ward in place of being just about the size of his city. What every board ought to do is to consider the school needs of its whole community and administer to the entire situation as seems best for the entire situation. Further, board membership should never be merely a matter of partisan politics in the sense that candidates therefor must become the candidates of particular parties and submit their claims to the arbitrament of popular elections. If school-board members are elected at popular elections, then the tendency is for school questions to get into politics, and school questions have no place in politics.

School-board members should be appointed by mayors, judges, or city councils. In this way the schools may be kept more free of politics, better men are likely to be chosen for board memberships, and the people at the same time can have a voice in the selection of board members without that selection becoming tangled up with all the issues that politicians usually fight over. The experience in this country is undoubtedly against the election of board members by popular vote, altho, of course, there may be exceptions to this rule.

As to the personnel of school boards, my own opinion is that as a rule, membership should be confined to wide-awake, sane, progressive, business and professional men who have business ideas and the tact and energy to get the most efficient work out of superintendent, supervisors, and teachers. The retired business man or the retired man of any sort, who has nothing to do but tinker with the actual administration of the schools, had better be left in private life. On the school boards of this country there are now numberless cases of individual board members who actually think that they were put in their positions to exercise expert supervision over schoolroom affairs. A prominent citizen in an Indiana gas-belt city, during his years on the school board, was accustomed actually to go into the schoolroom, listen to the recitations and make suggestions to the teachers. He had taught school a little while when he was a boy and he never recovered from what he learned, during that time, about teaching school. His hobby was grammar and he used to lead the teachers of that subject a dog's life by his perpetual interference with their work. That board member was a nuisance and should have been legally enjoined, if he could not have been managed any other way, from interfering with the work of the schools. One Indiana city at the present time has a board member something like the worthy mentioned above. He has plenty of money and does not work very much. He spends a great deal of his time inspecting the buildings, looking after the janitors, managing the ventilation, watching the teachers at work, and meddling with the work of the schools generally. He does not know anything about the school business but he thinks he does and he is in a position of authority. The teaching force is helpless. The only hopeful sign is that possibly this officious member will be retired at the end of his term. If the intimate history of American school boards were known, many such cases could be enumerated. In Indiana, fortunately, such cases are comparatively few. Our school boards are small, having only three members, with the exception of Indianapolis and Terre Haute, which have five board members each. The board members are appointed by city councils with the exception of Indianapolis where the people elect at large without regard to politics. The boards receive very small salaries and as a general rule only the best citizens are appointed to board memberships. Our boards are high class, with few exceptions. These exceptions because of their scarcity are noted all the more.

There is no room on any board for a crank, a hobby-rider, or an extremist of any sort. There needs to be an evenly balanced, sane administration of the schools everywhere. There is not a single school virtue but that can be made objectionable in the hands of a cranky board member. Medical inspection, cleanliness, the teaching of temperance, the teaching of patriotism, each and every virtue and rule of conduct can be run into the ground and made ridiculous and fairly loathsome to the pupils and teachers alike, if lop-sided board members or superintendents emphasize one or a few things to the perpetual exclusion of the rest. What we need is an all-around administration of the schools, that takes due care of everything that is fine and worth while. Almost every community has some citizen that would like to get on the school board so that he could revolutionize things. One man would run to seed on handwork, another would teach nothing but the three R's, another would emphasize the classics, etc. One prominent citizen in a certain city wants to be on the school board so that he can abolish the position of superintendent of schools in his community. He considers the superintendent as purely ornamental and would have the incumbent forced out and put at some useful employment. He has said over and over again that the ward principals can run the schools by having meetings and voting on all matters that the superintendent usually disposes of. Fortunately for the schools of our country, extremists as a rule do not find places on our school boards.

The question of whether women shall serve on school boards is being pushed to the front in many parts of our country. It is contended that women members of boards can deal better with the schools since most of the teachers are women and all of the pupils are children. The thought is that women understand naturally and instinctively the problems of the school better than men do. The thought that women would make better board members than men has its source largely in the erroneous notion that the board member's business is to deal directly with schoolroom problems, have conferences with the teachers and pupils and do many things that a woman can do as well as a man. The board member, according to such ideas, is actually to supervise the work of the schools. The truth of the matter is that the affairs of the school board are largely business matters. The fixing of tax rates, the distribution of funds, the erection of buildings, the providing for repairs to buildings, listening to complaints of citizens, buying supplies, hiring janitors, etc., constitute the greatest part of the school board's business. The average refined, sensitive woman is not fitted in any way to deal with such things. There are exceptions, of course, but not enough of them to prove the contrary of the statement that the average woman has little business on a school board. The movement for women board members is a part of the more or less hysterical movement over the country, looking to thrusting women into every conceivable position from heaving coal to the presidency of the

United States. The truth of the matter is that women as a rule are far better fitted by nature for positions in the schools as supervisors, principals, and superintendents. In these positions they can come into actual contact with teachers and pupils and do the good that many women think they could do if they were board members. A woman superintendent of schools, if she is of the right sort, can do a great work, but as a board member she is likely to tire soon of the only work she can do without interfering with the actual working of the schools with which she is connected.

The ideal board member never uses his position to further his own selfish ends. One Ohio board member uses his position to sell shoes. The employee of the schools that does not buy shoes in his store can depend on not getting his vote for reappointment. There are cases without number where teachers are made to feel that they must give their business to board members, that they must buy groceries and all the necessities of life of someone on the board of education. This sort of brow-beating and graft is too small and contemptible to believe possible. It ought to be against the law in some states for any teacher or other employee of any school system to make any purchase of any sort of any board member. Grafting off of teachers has been carried so far in some instances in some states that teachers have been required to pay for their appointments, cash in hand. Board members have been known also to make their teachers understand that the members' children must be favored and promoted whether worthy or not. Recently there came into the writer's own schools three boys. They had been attending school elsewhere. Time showed that every one of them was not prepared to do the work of the grade to which he had been promoted in the other schools. Investigation developed the fact that their father had been a member of the board in the town from which the family came. Being a firm man and being persuaded that his boys were as smart as other children, they were pushed ahead by the teachers because the father wanted them pushed ahead. The youngest of the three boys is at least three or four years ahead of where he ought to be, the next one about two years, while the oldest one can hardly hold his own in the grade to which he was promoted. So much for school-board dictation.

The ideal board member never tries to thrust anyone that is unfit into a teacher's or other position. Favorites and friends are not shoved into places for which they are not prepared. Last year one Indiana school board put into two high-school positions, over the determined opposition of the superintendent, two young girls who had just completed courses in "finishing" schools. They were totally unfitted for the work but their fathers were influential and were friendly politically and otherwise to the board. The year's work of these two girls was a miserable failure and soon became a joke. Even the board members saw the situation and let these two girls out this last spring. This kind of a story is one of the oldest in

school-board annals. Politics is one of the most familiar forces in many places in the appointment of teachers and janitors. One school board a few years ago saw to it that all the men teachers in its employ attended all the Republican conventions in that county and whooped it for factional candidates. In cities without number no man can receive an appointment as janitor unless he belongs to the same political party as the majority of the board. In many places even the men teachers cannot receive appointments unless they are "right" politically. The *first* great question is politics—the *second* is as to whether the candidates can fill their positions. So-called religious and church connections also often play a prominent part in school affairs. A number of years ago the writer wrote to a friend in an Ohio city about a certain position in a high school. The reply came back "No Methodist need apply." The inquiry went no further as the applicant was a Methodist. There was never a question as to his fitness for the position. In another city for a long time no one but a Methodist could be elected superintendent. That was the first question. The second was as to whether he was married. The third was as to whether he was all "right" politically. Whether that board ever got as far as asking anything about the preparation of the applicant for the work he was supposed to do, I do not know. In a certain small city, for a number of years, the Presbyterians have been dominant on the school board and the corps of teachers up to this summer has been largely of the same faith. The Methodists have now secured control of the board and they have announced their policy of hiring a corps that belongs to the "right" church. The superintendent and high-school principal were the first to go and the rest have doubtless gone by this time. Such cases need no comment. It is easy enough to guess as to the kind of schools that exist in communities where religion and politics are the dominant standards in the selection of teachers. The ideal board never asks any questions as to the religion or politics of any applicant. The ideal board asks only: "Does the applicant live a clean life and can he do the work required?"

Another element in school-board affairs in many states is the influence of certain book companies. Happily in Indiana book companies have nothing whatever to do with school-board affairs. Book agents never call on board members. All our grade books are selected by the State Board of Education and the state board also makes recommendations as to selected lists of high-school texts. No book company undertakes to dictate appointments of teachers anywhere in Indiana. It is not so in some states. Book companies step into local politics, elect board members and then appropriate all the adoptions of textbooks. A certain Ohio superintendent lost his position this last spring. When a member of the board was asked about the matter, he replied: "I don't think he treated the company right." The superintendent had been brave enough to think that a certain high-school text was the one he needed in his school—

a text that was not published by the company that owns that community—body, soul, and school board. In some states the school-board and book-company situation is something deplorable. No good schools can exist where a book company steps in and dictates adoptions and appointments.

Occasionally it happens that some man totally unfitted either by education or experience for school-board service gets such a place. The whirligig of politics in school affairs some little time ago placed an ignorant blacksmith on a certain Ohio board. After his election he was put on the board committee to select textbooks. He had to pass on the merits of texts in Latin, mathematics, etc. He barely knew how to read and write. A book man who was interested in Latin texts told me that he went to that city to look after an adoption. He was compelled to seek an interview with the blacksmith who while shoeing a horse aired his ignorance of books in general. The book man soon found out that the board member was being guided by what his boy thought of the high-school texts. The boy was a student in the high school. The book man sought the boy, cultivated his acquaintance and told the boy what a fine Latin book the agent wanted to put into the high school. The result of the whole disgusting business was that the Latin book was adopted on the judgment of an immature and callow youth who knew nothing whatever about the merits of textbooks. Instances of this kind are likely to happen in any place where standards other than fitness rule in the selection of members of school boards, the adoption of textbooks, and the appointment of teachers.

Politicians of a low sort, saloon-keepers, and kindred spirits have no place on school boards. Men that once taught school and have never learned anything about the business since had better not be placed on school boards. Men who at some time have had school-board experience and who think the schools ought to be conducted now just as they were at that other time ought to stay off of school boards. As has been said before, the ideal board member is the man that has business ideas, is sane, broad-minded, free from political and denominational influences so far as the schools are concerned, is progressive, wants only the best things for his schools, does not favor the appointment of any person that is unfit, and has an eye single to the welfare of the schools under his control. The ideal board member cannot be swerved from his purpose of doing his duty wholly and fully. The ideal board member does not think that just anybody with a little training can act as superintendent of schools. The ideal board member is not afraid of the expert in school affairs. He believes in plenty of training and experience in the school man. He extends to the superintendent the broad sympathy that gets the best out of the superintendent and makes him glad that he is alive and has the privilege of working for such a fine board as he has.

The school boards of this country as a class need higher ideals as to their service and usefulness. They need to take school-board journals and

teachers' journals and keep up with the times. They need to remember that they are serving the people in the highest way. They need further to remember the fact that oftentimes they will be misrepresented and misunderstood. Their calling is a high one and worthy of the best work of our best citizenship.

This paper has contained much of criticism. It would not be complete without saying that the criticisms contained do not apply to all school boards, not even to a big percentage of them in my own state. Nothing herein said has been said out of a spirit of bitterness because of experience with poor board members. All the boards that the writer has dealt with have been men of the highest type of citizenship, working long and patiently, and keeping the highest ideals before them. Not one of them has ever asked as to the politics or religion of an appointee. All of them have favored the highest possible wages and the best working conditions. Not a single selfish vote has ever prevailed in the board meetings that the writer has officially attended. Every board member has served at a sacrifice of time and money. The writer's school board at present is composed entirely of college graduates. It is no idle compliment, paid in an effort to flatter or to secure favor, but the writer wishes that every superintendent in the land had a school board so fair-minded, so square, so progressive, and so efficient generally as the one with which it has been his rare privilege to work thru these splendid years.

THE RELATION OF THE INDIANA ACCOUNTING BOARD TO PUBLIC SCHOOLS

W. A. MYERS, SUPERINTENDENT OF SCHOOLS, HARTFORD CITY, IND.

The department of inspection and supervision of public offices in Indiana was created by an act of the Indiana legislature in March, 1909. The work of this department is directed by the state board of accounts, consisting of the governor, the auditor of state, and the state examiner. The principal officer of this department is the state examiner, who is the executive and administrative officer of the board. He is a skillful accountant and versed in public accounting. He is the force that has stirred things in Indiana. There are two deputy examiners, appointed by the governer; a chief clerk with fifteen clerical assistants, appointed by the chief examiner, and a force of fifty-two "field examiners," the law permitting the appointment of one hundred. The field examiners are skilled accountants, and, while they are appointed by the state examiner from a list of persons made eligible thru competitive examination, they are selected also for their ability to ferret out errors, frauds, and crookedness in the accounts examined. The accounting board has not been in existence long enough to put into effective operation all the powers granted it under the law creating it, or to demonstrate fully its usefulness.

The work of the accounting board covers every public office, public officer, public institution, and public-service industry that receives, disburses, handles, or uses public funds. Thus township trustees, school boards in cities and towns, and school commissioners in the larger cities all come under the inspection and supervision of the accounting board. Every relation of this board with the public schools is one directly or indirectly connected with the management of the school funds. Directly, it touches every financial transaction of every public-school officer. Indirectly, it bears on every phase of his public conduct. The field examiners make a careful inspection of every account and report thereon to the state examiner. If the report shows any school trustee or treasurer of any school board short in his accounts, action may be had to recover the amount. This action under the original law rested with the state's attorney-general. Under the amendment of 1911 it rests with the county prosecuting attorney. The amendment also authorizes the examiner under certain conditions to make settlement.

The work of the board has been in two directions—one retrospective and critical, the other prospective and constructive. The field examiners are sent out two by two to do their work. They have examined the accounts of receipts and expenditures of public-school money handled by the 1,017 township trustees, and many of the school boards, covering a period of from four to six years, in some instances going as far back as ten years. They have brought to light many questionable and illegal transactions. Only a few typical illustrations out of scores can be given: One trustee forged a receipt for several hundred dollars' worth of school supplies that had never been bought. Another raised a receipt of $3.15 to $13.15 by inserting the figure "1" before the "3" and awkwardly adding "teen" to the word "three." Investigations were made into funds misappropriated, diverted, and unaccounted for. One trustee's books showed that he had paid a teacher $445.00 for his services, whereas his contract and his sworn statement showed that $345.00 was the amount received. Another trustee in a rich township failed to account for over three thousand dollars of special school funds.

The attorney-general, acting on the information set forth in the reports of the field examiners, has brought suits to recover these illegal and improper diversions of the public funds. Many of these accounts have been paid; others are in litigation, while others are awaiting action by the local prosecuting attorneys under the amended law.

The permanent school fund, a part of which is made up of the surplus revenue distributed to the states by President Andrew Jackson, is distributed among the counties of the state to be loaned on first mortgage. It is the duty of the county auditor to transact these loans. Many auditors had not made these loans, thus leaving the county to pay the interest due to the state, while other auditors had permitted the loans to lapse or to stand

on property much depreciated in value. No investigation into these loans and the status of these funds had been made since 1866 until the state board of accounts examined into them within the past eighteen months. They have now been placed on a "live" and proper basis.

Thru the work of the examiners large amounts of taxable property marked "exempt from taxation" have been placed on the tax duplicates, thus increasing both the local and state school revenue. One instance out of many will illustrate this: The county duplicate valuation of a certain man's property in Lawrence County in 1904 was $50,247.00, while the city duplicate valuation in the city in which he lived and in which the tax-rate was high was only $26,166.00—a difference of $24,108.00, making a difference in his taxes for that year of $225.00.

Many forms of deceit and petty graft have been exposed by the field examiners. While most of the school officials have kept fairly correct and accurate accounts of the funds in their charge, the work of the accounting board has revealed a condition of poor, careless, inaccurate, slip-shod methods of keeping accounts.

Acting on the facts and conditions revealed in these examinations the accounting board began a constructive campaign to bring order out of chaos. It first devised a simple systematic method of keeping accounts for the township trustees. It will devise later, as it finds time, similar methods for the school boards of towns and cities. It has established uniformity of accounts for all funds of the same class. This causes every trustee to keep a separate and accurate account of each fund. Much of the chaotic condition existing has been due to the fact that there was no established standard, and to the fact that trustees were ignorant of the necessity of keeping a careful and separate account of each fund.

A system of reports is required of each school trustee and school board to the state examiner. This includes, among other reports, inventories of school properties, the tax levies and appropriation by the township advisory board for tuition, special school, and bonding fund, and the trustee's estimate for the same items. Copies of all notices for contracts, for bids for supplies, and for materials of any kind, as well as copies of all bids submitted for these things, must be sent to the state examiner. The trustee also sends to the state examiner a copy of the accepted bid. A form containing a classified list of all supplies has been arranged by the state examiner. This classified list includes everything needed for school purposes. All successful bidders must give bond and make oath that if the price of any article is reduced to any other purchaser, it must also be reduced to the purchaser under the bid. Thus it will be seen that the state examiner has a check on every item of expenditure of the trustee.

Accounts are examined yearly without notice. By the new system of keeping accounts and by the system of reports indicated above, the examination of the books of any officer can be quickly and accurately made and the irregularities promptly detected.

All fines and forfeitures of bonds and recognizances are added to the permanent school fund of the state. Many of these fines and forfeitures in the courts of justices of the peace, city mayors, and city judges were not reported, and many others were illegally remitted. The permanent school fund in this manner lost annually many thousands of dollars. Since the accounting board has taken hold of this matter and prescribed regular and uniform reports, all fines and forfeitures are promptly reported and paid into the common-school fund.

Prior to the operation of the accounting law, school teachers in the rural communities and the smaller towns were often not paid their wages at regular intervals but were paid portions of their salary at whatever irregular times they might request them. Now they are paid monthly by a regular prescribed form of voucher.

The effect of the work of the accounting board has been to promote the wise and economical expenditures of school money. A comparative statement of expenditures of school money in the townships alone in the state in 1908, the year previous to the taking effect of the accounting law, with that of 1909, the first year of the law's operation, shows a decrease of $207,175.00 in the expenditures from the special school fund. Altho less money was expended, better equipment and supplies for the schools were procured, because every dealer had to submit a bid at a definite price for each article of a standard value or grade. The period of unnecessary and useless supplies has ended and the day of the persuasive agent with the enticing article at a fancy price has passed. It is true in some instances that the law has hindered the expenditure of money for necessary and proper supplies because of the timidity of some school officials who do not understand the law. The accounting board co-operates, advises, and suggests. Its work has been wholesome and good in the administration of the school fund of the state. The law has proven, in the brief time of two years, to be a wise and useful one.

PUPIL SELF-GOVERNMENT AS A TRAINING FOR CITIZENSHIP

RICHARD WELLING, CHAIRMAN, SCHOOL CITIZENS' COMMITTEE, NEW YORK, N.Y.

The School Citizens' Committee is glad of this opportunity to lay its case before specialists in school administration. Eight years ago I addressed the general body of this Association on "Training for Citizenship in the Schools" and while there seemed to be a consensus of opinion at that meeting in favor of specific preparation for citizenship it does not seem to have resulted in any widespread effort to improve civic training. Indeed, in this year, 1911, our committee finds school officials in the main either apathetic toward the subject or vigorously opposed to the principle we advocate. To the members of this Department this problem is presented anew and from you we expect a frank discussion.

Our point of view is that of citizens interested in the public schools. Our interest is the result of a somewhat extended experience in political movements. It is alarming to realize how little the American people are concerned with their public affairs. In the few days preceding elections they are much aroused about measures and men. But when the great day has passed there is a general sigh of relief that "it's a good thing it comes only once a year." The only other events that rouse them from their civic slumber are the prosecution of public officials and the uncovering of graft. In the absence of these, the average American citizen devotes himself without interruption to his personal affairs. This is what is known as public apathy, and instead of its being the object of attack from all citadels of progress, it is looked upon as an elemental fact of civic life. Writers, preachers, teachers, publicists, all agree that the greatest asset of the political boss and the greatest obstacle to a purer and more enlightened democracy is the apathy of the mass of citizens. We do not ask ourselves often enough wherein lies the cause of this apathy. Believing the schools were largely to blame, this committee instituted an inquiry some years ago to ascertain what they were doing to prepare the youth for the responsibilities of a democracy. We found the study of books on civics containing the structure and functions of government practically the only attention given to this subject.

Of course, to expect good citizenship to result from such study would be as reasonable as to look for a proficient engineer among men who had absorbed all the book information about engines but who had never seen one.

Let me make our position perfectly clear. We believe that the general tone of citizenship is low because public education has not yet seriously attempted the training of youth for its future place in the commonwealth. This was the ideal of all the great ancient states: Judea, Sparta, Athens, and Rome. It is urged that the proper development of the individual will carry with it that community-sense which is the foundation of a democracy. Perhaps it ought to do so but the fact remains that it has not done so. This we know—that in the main, our people are lacking in a true conception of the benefits of democracy; and this we believe—that by permitting the pupils in the school to share in its government they will become habituated to democratic living.

This solution is not put forward as a panacea, but we do believe it to be an efficient method of giving the pupils a habit of mind that will consider the public business a matter of the private citizen's interest.

We advocate the vitalization of civics by some form of pupil co-operation. We believe in this as a principle of life. We advocate no one method. We know of forty schools organized upon differing forms of pupil co-operation and each has a method of its own. The principle must be applied thru the agency of whatever form fits the needs of a given locality.

Forty principals report their schools working under different forms of pupil co-operation. Five thousand pupils in the forty schools—while criticizing with admirable frankness some of the shortcomings they have noticed—respond with zest and with understanding as to the part they are allowed to take in the government of their schools.

We advocate some form of pupil co-operation with a citizenship and elected officials in the last three years of the elementary school and thruout the high school. We believe that these seven years of training in democratic living will so accustom the pupils to sharing their common business that when they come to man's estate they will naturally take an effective part in public affairs.

Our efforts to inaugurate this system have brought forth many objections from teachers, principals, and superintendents. These objections were collected and submitted to a principal who has conducted a school state for five years. He has answered the objections out of his experience, and I submit both objections and answers for your consideration.

Objection No. 1.—Pupil co-operation calls for a mental development that children do not possess. Neither is it desirable that children should become legislative, judicial, and executive. We want to keep them young as long as we can.

Answer.—We have found the pupils of the sixth, seventh, and eighth years all normally developed, able to conduct their own affairs—under judicious supervision. As for the contention that co-operation induces precocity, it is unfounded. The children, both officers and citizens, are thoroly normal, healthy, and sport-loving young Americans, and, I may add, leaders in general athletics.

Objection No. 2.—Children, when vested with power, become arrogant.

Answer.—Five years of pupil co-operation have failed to bring forth a domineering state official.

Objection No. 3.—In the last analysis the supervision necessary makes mere puppets of the children.

Answer.—Judicious supervision exercised along the lines of friendly control has quite the contrary effect. Pupils, teachers, and principal become co-workers and there is a mutual exchange of suggestions that is helpful to all. Initiative is fostered in the pupils and they experience the miracle of co-operative action.

Objection No. 4.—The machinery is so elaborate that the purpose is destroyed.

Answer.—Yes, if the machinery is so elaborate, this is true; but it need not be, and in successful systems it is not. This objection is founded on the erroneous idea that pupil co-operation is a fixed plan that cannot be modified. Every principal must work out her or his own plan—any other will be liable to failure.

Objection No. 5.—The energy expended is not worth while.

Answer.—If a wealth of school spirit and an attitude of co-operation on the part of pupils and teachers for the welfare of the school state is not worth while, is anything in this world worth while?

Objection No. 6.—Pupil co-operation is simply for show; it cannot take care of those serious cases, e.g., thievery, etc., which come up in every school.

Answer.—This objection supposes that the entire government of the school is in the hands of the pupils. Rather is pupil government an auxiliary of the regularly constituted school régime, and makes the handling of untoward events a simpler procedure than usual.

Objection No. 7.—The children of our day are more in need of respect for authority than the exercise of it.

Answer.—Why? The children of our day have been quickened by the inquiring spirit of our times and are quick to detect the shallowness of the autocratic system. But where they are trained to a rational respect for authority thru a realization of the necessity of it and the participation in the exercise of it, their respect and loyalty become unshakable.

Objection No. 8.—Pupil co-operation destroys one of the greatest influences of the school—the principal's and teachers' personal influence.

Answer.—Thru five years the principal and teachers and pupils have been brought constantly into closer and more efficient co-operation.

Objection No. 9.—The activities of self-government are mere play. The children realize that the principal and teachers constitute the real governing power of the school.

Answer.—In a well-organized system the jurisdiction of the pupils is clearly defined, and realized, and lived up to; that they know an appeal will always lie to the principal is only a safeguard against undue punishments. The children, of course, enjoy elections and legislating, but what objection is there to that? Their characters are being molded for democratic living; and are being molded effectively and joyfully. What more can one ask of an educational method?

Objection No. 10.—We have self-government without the machinery. Our children are orderly, polite, and considerate. We do not need legislatures, courts, police, etc.

Answer.—And when the children leave the school they will continue to be orderly, polite, and considerate. Each will go his way and work out his own salvation, thinking that the government of his city and state and nation is to be left to the politicians. And when he awakes to the fact that the politicians are in the governing business for what they can get out of it and he undertakes to ameliorate conditions by enlisting the interest of his neighbors and friends he will find them preoccupied and apathetic. Pupil co-operation aims to make apathetic citizenship militant.

Objection No. 11.—There are so many new and desirable suggestions offered for improving the schools that we hesitate to adopt this before we estimate its relative importance.

Answer.—Pupil self-government does not compete with vocational training, school gardens, and other suggested additions to the curricula. Rather it supplements all school work by putting the pupils on a sounder basis for effective work in every branch of study. Under the conventional school régime, regulations and improvements come from the principal's office. With pupil co-operation each child feels a responsibility for the common welfare and feels free to "speak up," to correct a defect, or to suggest an improvement.

Objection No. 12.—It takes up too much time.

Answer.—It takes five minutes of school time for voting at the beginning of the term. The time given to it by the teacher in charge or the principal (about two hours a week after school) is a voluntary offering such as is given to athletics, clubs, school orchestras, and other extra class activities.

The idea has passed the experimental stage. Whether it be the Brownlee system, which emphasizes the preliminary character-training side of self-government; the Ray system, which employs a Roman form of self-government; the school-city plan, which applies the principle thru the organization of a modified municipal government; the school state, the school country, the student council, the commission plan, or whatever other plan may be devised, the vitalization of civics is a growing factor in the schools. The pity of it is that it is not growing faster.

Manual training, drawing, chemistry, physics, dancing, are taught by action. All these train for individual progress. But civics, the one subject to which the community can look for a direct return for its support, is confined to the perfunctory perusal of the dead letter. Do you think that from the standpoint of citizenship our public education has been a paying investment?

Let me ask you what actual preparation for civic life has the young man had who is approaching his first vote?

Do you suppose that spectacles such as the vote selling in Illinois, in Indiana, in Ohio, and in Putnam County, N.Y., could take place if those people had been trained to realize the value and the privilege of the vote?

The present situation is this: that we are leaving citizenship to the book, to the platform lecture, and to the patriotic song. The time has come to couple up theory with practice. There is only one way to teach citizenship effectively, that is by action. This is good psychology, good pedagogy, good administration, and good democracy.

PRESENT-DAY TENDENCIES OF SCHOOL ARCHITECTURE

NORMAND S. PATTON, CHICAGO, ILL.

School buildings are planned thru the co-operation of educators, architects, and school boards. A knowledge of the tendencies of these three groups would enable one to forecast the school architecture of the near future. If I were addressing the general public, I would describe those changes in our educational system that call for new types of buildings; but coming as an architect among educators, it is to learn rather than teach this branch of the subject.

Our educators must be the leaders in developing our system of education, and architects must adapt school buildings to the educational program.

In searching for the present tendencies of architects, there lies on the surface the fact that architects are coming under the influence of the educational system. The route to the architect's office lies no longer thru the carpenter shop, but thru the college and the technical school. Raising the standard of education among architects means better buildings of all classes, including schools.

The public school boards of today show a disposition to erect better buildings than formerly, and to provide more money both for building operations and for the services of the best architects. This liberality is due mainly to the general interest in all that promotes the welfare of children, and is an expression of the desire of the public.

This advance in the quality of school buildings is keeping step with the general advance in the architecture of all classes of buildings. It is a part of our higher scale of living and the demand of an educated and well-to-do public.

There is a marked tendency toward architectural display in high-school buildings more than in the grade schools, due rather to local pride than to any greater care for the older pupils. There is but one high to many grade schools, and it is natural to select this building as one of the public monuments of the town.

As the result of these forces we are now in a time of active evolution and improvement in the construction and design of our schools, and the moral of this tale is that if we build our school just good enough for today, it will be out of date tomorrow. We must forecast the future and build for it, if our work is to be permanent.

To come now from the general to the particular, what are the special improvements toward which we are tending?

First, better construction, especially in resistance to fire and in provision for exits. City and state building-laws aid this advance. Our larger cities require all schools to be of fireproof construction. The example of these buildings leads architects to approximate, at least, fireproof construction in other communities. The approximations consist in more numerous brick walls; the isolation of the stairs, and making stairs and corridors fireproof; the substitution of metal for wood lath, or the use of tile partitions; the making of the main floor fireproof, even tho the upper floors and roof be combustible. The object to be sought in the construction of a school is to make a building in which the escape of the pupils cannot be cut off by fire or smoke. A fire in the roof space might ultimately spread downward and destroy the building, but there would be ample time for the pupils to escape before the fire or smoke could reach them; but a fire in the basement would travel upward rapidly and the smoke would fill the corridors. Hence the value of a fireproof floor above the basement.

If a school is reasonably well planned and built, there is little danger of actual contact with fire. The greatest danger is from panic and the resulting crushing on the stairways. The conspicuous avoidance of all combustible materials in the corridors and stairs will do much to allay groundless fear and thus avoid panic. If, from daily use of fireproof exits, both teachers and pupils gain the impression that their escape cannot be cut off by fire, they are not likely to lose self-control in time of actual alarm.

Another improvement is in the line of better sanitation. The heating and ventilating system is a most vital part of a model school. Steam heat is supplanting hot-air furnaces. Ventilation by natural draft can be made fairly efficient for grade schools of not over eight rooms, but for larger buildings, and all high schools, mechanical ventilation is now considered a necessity. Automatic temperature regulation is no longer an experiment, but an essential part of a ventilating system for schools.

The limits of this paper will not permit a discussion of the details

of heating and ventilation. Architects and engineers are in substantial agreement as to the methods to be employed. However, the experiment of open-air schoolrooms being tried in certain schools is worthy of serious consideration and it seems to be demonstrated that by introducing sufficient moisture into the air of the schoolroom, the winter temperature can be reduced to sixty-six degrees, or even less, with a marked benefit to the health of the pupils.

Since modern plumbing has become almost universal in the homes of the pupils, there is a tendency to make the fixtures in the school correspond to those with which the pupils are familar at home; and to locate the toilet-rooms on the various classroom floors in place of concentrating the same in the basement. In such sanitary reforms as the abolition of the public drinking-cup, our schools are abreast of the times.

The ratio of window surface to the floor area is controlled by law in many states and there is little danger of insufficient windows in the schoolrooms of today. There is danger, however, of cutting off the light by an improper use of window shades. The object of shades in a schoolroom is not to make the room dark, but to screen it from the direct rays of the sun. Therefore, opaque shades should never be used. The best material is Holland cloth of a light buff color. The sun shining upon this material transmits a soft, mellow light. The dark part of a room, of course, is the side remote from the window. The light for this side must come from the top of the windows. Therefore window shades should never be hung at the top of a schoolroom window. The best method of placing shades is to hang two shades to each window, both rollers being placed at the meeting rail of the sash, one shade to pull down and the other to pull up.

There have been great improvements in artificial lighting within the past few years. But, as schoolwork is conducted mostly in the daytime, the question of artificial lighting is not important, except in special cases.

The greater specialization of our present method of teaching and the addition of laboratory work, have led to the provision of special rooms. High schools, especially, have developed into complex structures. A well-equipped high school will include an assembly hall, a library, and perhaps a museum, gymnasium, and laboratories for chemistry, physics, and biology; shops for manual training; a kitchen for domestic science, with model dining-room; perhaps a room for sewing; a commercial room; drawing rooms for mechanical and free-hand drawing; modeling rooms with perhaps a kiln for burning pottery. One recent high school has an elementary-science room, and special rooms for the study of the classic languages and English. The "classic room" is designed and furnished in the Roman style, and the "English room" in the English style, with red quarry tile floor, brick fireplace, oak beamed ceiling, and stained-glass windows. A large sliding partition between the rooms permits uniting the two into a clubroom for the use of student societies. The intention

of these rooms is to stimulate interest in these special studies by appropriate surroundings, and thus compete with the highly specialized science equipments.

Gymnasia, which were formerly placed only in large city high schools, are now becoming an essential part of every complete high school, and are being extended to the grade schools. If the movement shall prevail to broaden the usefulness of our schools to the community, further changes in the buildings must follow.

No one who has observed school buildings of recent years can have failed to notice an improvement in the character of the designs. This improvement is due partly to general advance in the quality of American architecture, but perhaps still more to the improvement in the quality of school boards, and their appreciation of good architecture. This leads to the selection of a higher grade of architects. Another tendency that makes for the improvement of school building is the abandonment of the evil practice of having architects submit designs in competition. This practice has almost passed away, and architects are selected as a superintendent of schools would select his teachers, on the basis of their record in work already completed.

An examination of recent designs of school buildings, by many architects, and in all parts of the country, shows a tendency to greater individuality of design and a following of no particular architectural style. The best school design is that which follows no historical style of architecture, but is developed rationally from the conditions of the problem. For example, the large window area necessary in a classroom necessitates the use of very narrow piers between the windows. There is thus developed the idea of making the windows of each classroom into a group. If such window-grouping is adopted, a style of design must be used that will lend itself to such treatment.

What is true of schools, holds good for all buildings. Every new type of building requires the development of a new style of architecture, or at least the modification of some old style. The breaking-away from historic styles of architecture, and the evolution of new forms of design to meet new conditions in school buildings is one of the hopeful signs in present work.

The past ten years have seen rapid changes in building materials, Architectural design is affected not only by the purpose of the building. but by the material used. It is an axiom of architecture that no material should be used in imitation of another, but each material should be treatep in accordance with its nature. Therefore the introduction of new materials, differing in nature from those formerly used, calls for new forms of design.

Exterior plastering in Portland cement has largely taken the place of wood as a covering for wood construction. Such a construction of wood frame, covered with plaster, is appropriate only for very small schools.

At the present time, a construction is developing of hollow tile for walls with a ribbed surface to receive plaster directly on the tile, both exterior and interior.

Exterior plastering has been introduced by architects as something better than wood siding or shingles, and, as a rule, this material has been handled in a truthful and artistic manner, in accordance with its nature. It is used as plaster, not in imitation of any other material.

In contrast to this, cement blocks have been invented as something cheaper than stone, and are usually made in imitation of stone. As an imitation, they are a fraud, and are not good art. Cement blocks can be made in a truthful and artistic manner, but the large and uniform size makes them a poor material from the point of view of design.

Concrete, poured in place, can have a satisfactory treatment of the surface, but such treatment is expensive and this material is better adapted to constructive than decorative forms.

Of all new materials, vitrified brick seems the best adapted for general use in school buildings. This material has brought about such a complete revolution in our ideas of what brick should be, which I venture to expand somewhat in description of the new idea in brick. The old idea was mechanical perfection. The attention was concentrated on the individual brick rather than on the wall. We sought brick with smooth surfaces, straight edges and uniform color. They were laid with fine joints. When the utmost perfection was attained in this direction, what did we have? A wall without force or character. The best brick wall seemed inferior to the meanest stone wall. We never escaped from the pettiness of the material. The soot of our cities stained the surface and the alkali came out of the wall whenever the water penetrated the porous brick.

Now we no longer think of bricks, but of brickwork. We seek a wall surface of varied colors, and a marked texture. We want a material that will appear as solid as stone and be washed clean by every rain. We prefer large joints that bespeak strength rather than fine joints, whose noblest quality is neatness. We think of a wall of a building, as we look upon the walls of the Rocky Mountain canyons. The rocks were built up by nature layer by layer, and the marks of stratification are apparent. We do not, however, dwell upon the smallness of the layers, but upon the massiveness of the rock. So with our wall of brick, it is built course by course, but when made of materials vitrified by fire and bound into one mass by cement, we lose sight of the individual bricks and see the wall which rivals stone in durability and massiveness and exceeds it in its capacity for color.

The latest improvement in the manufacture of brick is to roughen the surface of the stiff mud, as it comes from the machine, by cutting with wire, thus producing a variety of beautiful textures, according to the nature of the clay.

Vitrified brick is so different in character from the smooth and porous pressed brick that it is leading to the development of new styles of architectural treatment.

One of the most important movements in architectural circles has not as yet affected school building as it should. I mention it here in the hope that if school architects lag behind, the teachers may spur them on.

I refer to the grouping of buildings and the treatment of grounds as an integral part of architectural design. It is not often that public school buildings are built in groups, but even in the case of a single building, the location should be considered in reference to surrounding buildings, and all schools that have open grounds around them should have those grounds designed with as much care as is bestowed upon the building itself. Some architects have given study to this subject and can make designs for landscape accessories, but in most cases it is better to employ a landscape architect, who should be selected by the architect of the building and work in consultation with him.

In conclusion I offer a suggestion to anyone contemplating building, that if you would get the best services from your architect, call him into consultation at the very beginning of your building enterprise, even before the site has been selected or the bonds have been voted.

LIBRARY DEPARTMENT

SECRETARY'S MINUTES

OFFICERS

President—Edwin White Gaillard, New York Public Library..... New York, N.Y.
Vice-President—James L. Gillis, librarian, California State Library.....Sacramento, Cal.
Secretary—Gilbert O. Ward, librarian, Technical High School .....Cleveland, Ohio

FIRST SESSION—Thursday Forenoon, July 13, 1911

The meeting of the Library Department was called to order in Golden Gate Corinthian Hall by the vice-president, James L. Gillis, state librarian of California. In the absence of the secretary, Harriet G. Eddy, county library organizer, State Library, Sacramento, Cal., was elected secretary *pro tempore*.

The chairman appointed a committee on nominations, as follows:

William R. Watson, librarian, San Francisco Public Library, San Francisco, Cal.
Ella S. Morgan, librarian, High-School Library, Los Angeles, Cal.
Lauren W. Ripley, librarian, Public Library, Sacramento, Cal.

A committee on resolutions was named as follows:

Charles S. Greene, librarian, Public Library, Oakland, Cal.
Joseph Daniels, librarian, Public Library, Riverside, Cal.
Victoria Ellis, librarian, Public Library, Long Beach, Cal.

The first paper on the program was "The Proper Supervision of the Reading of School Children," by Katherine D. Blake, principal of Public School No. 6, New York City, and was discussed by Mrs. Adelaide Bowles Maltby, librarian, Tompkins Square Branch, Public Library, New York City, and also by Miss Blake.

"High-School Libraries" was the subject of a paper by Ethelwyn H. Fagge, librarian, Polytechnic High School, Los Angeles, Cal., which was discussed by W. H. Housh, principal, Los Angeles High School, Los Angeles, Cal.

Harriet G. Eddy, county library organizer, State Library, Sacramento, Cal., read a paper on "California County Free Libraries," which was discussed by L. W. Ripley, librarian, Public Library, Sacramento, Cal.

The Committee on Resolutions then presented its report, as follows:

Resolved, That the Library Department of the National Education Association regrets greatly the enforced absence of President Gaillard, detained in New York by the strenuous work of moving into the new building of the New York Public Library. We also regret the absence of Mr. Ward, the faithful secretary.

Resolved, That we reaffirm that it is the duty and the privilege of two great civilizing forces, the school and the library, to work together in harmony and close co-operation for the cause common to them both of universal enlightenment.

Resolved, That committees be appointed to advance the interests of school libraries, thruout the country, to study the situation, and to encourage and promote a close co-operation between public and school libraries. That one committee of five be appointed for the normal schools; one of five for the high schools; and a committee to make out a suitable list of books for reading in the various grades.

Resolved, That while the American Library Association booklist is admirable in many ways and is used extensively by all who make the selection of books a matter of conscience, we should like to have it give more attention to books for the young, both as to number of books and extent of treatment.

The Committee on Nominations reported as follows:

For *President*—Henry E. Legler, librarian, Public Library, Chicago, Ill.
For *Vice-President*—W. L. Brown, librarian, Public Library, Buffalo, N.Y.
For *Secretary*—Miss M. A. Newberry, Public School Library, Ypsilanti, Mich.

The following committees were subsequently appointed by the president, in accordance with the resolution presented:

COMMITTEE ON HIGH SCHOOLS

Mary E. Hall, librarian, Girls' High School, Brooklyn, N.Y., *Chairman.*
Ethelwyn H. Fagge, librarian, Polytechnic High School, Los Angeles, Cal.
Gilbert O. Ward, librarian, Technical High School, Cleveland, Ohio.
Florence Hopkins, librarian, Central High School, Detroit, Mich.
Anna Hadley, librarian, Gilbert School, Winsted, Conn.

COMMITTEE ON NORMAL SCHOOLS

Ida M. Mendenhall, Normal School, Geneseo, N.Y., *Chairman.*
Margaret Dold, Normal School, Chico, Cal.
Grace Salisbury, Normal School, Whitewater, Wis.
Mary Richardson, Normal School, Castine, Me.

The meeting then adjourned.

HARRIET G. EDDY, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

THE PROPER SUPERVISION OF THE READING OF SCHOOL CHILDREN

KATHERINE D. BLAKE, PRINCIPAL, PUBLIC SCHOOL NO. 6, NEW YORK, N.Y.

I have come before you to plead for a little piece of constructive work. In the elementary school we have lists of books that are recommended for the use of children. Too often books are put upon these lists for personal reasons or without a proper reading by a person who is familiar with the needs of children. Our lists of recommended books, like our courses of study, are made by people with gray hair, who remember their boyhood in the middle of the last century and order for these twentieth-century children the things that pleased them when they were boys, not realizing that times have changed and that we must give these children books that will build for them twentieth-century ideals. I feel particularly strongly about the necessity for the proper supervision of children's reading, because I, as a child, had the unsupervised range of a very large library. The *Arabian Nights* and all sorts of fairy tales fed my imagination; I adored Robin Hood and Dick Turpin, and a little later Napoleon was my hero. I realize how much time in my life was wasted by having the wrong ideals because of my absolutely unsupervised reading. We cannot overestimate the effect of books on children at the formative period. The kind of fairy tales that they read will leave a lasting impression, and we principals of schools are too busy to read all the books that come out. I try to read all the books that are ordered for the school library before they go into the

hands of the children, but sometimes I am rushed and a book slips by and is taken because of the honored name that introduces it to us. I feel free to mention one instance because the name is so honored and its owner is so far away. I speak of Andrew Lang's *Fairy Tales*. I do not know whether you are familiar with these books. I ordered them for my girls because of his name, and they had been in the hands of the children for some time before I realized how very objectionable many of the stories were—teaching race prejudice and cruelty. For example, I remember one that ended: "So they rolled the Jew in a barrel with spikes on the inside until he was dead." Is it right for us to put in the hands of the children stories that end, "So they got married and lived happily ever after"? Those of us who have gray hair know that this is not true in real life, and this twentieth century demands a scientific training of its people; yet we hold out to these children in their childhood ideals that they must change and live down. I know how hard it has been for me to do this. As a child, I lived in a fairy tale; the world around me was as nothing. I told myself a fairy story that lasted from day to day and from week to week, in which I was the heroine of all sorts of wonderful adventures, and always at the end, like my fairy stories, I "got married and lived happy ever after." It has taken me years to live down this fairy-tale age, to open my eyes and see the real world that lies around us and to know how much more wonderful it is than any fairy tale that ever was written. I want to save the twentieth-century children from these wasted years that I have lived thru and so I beg you librarians to form a committee to make a list of books that we can recommend to children and feel safe in their recommendation; not a list of obligatory reading but just a little set of books for each year of childhood that shall take the place, with our children, of Dr. Eliot's five-foot shelf of books. I want a short list, not more than twelve for each year of childhood, but they must be books that will inspire these twentieth-century children to higher ideals than those of the nineteenth century. These books must be interesting, cultivate the imagination, and teach them courage—I set that first because it is fundamental; without courage we have none of the other virtues—ideals of real truth, honor, and justice.

If it is in order I should like to move the formation of a committee to select the lists that I have suggested.

DISCUSSION

Mrs. Adelaide Bowles Maltby, librarian, Tompkins Square Branch, New York, N.Y.—If Miss Blake and her work, by her own admission, are the products of such "unmoral" tales as she has held up as horrible examples, then I am sure you all agree with me when I say I am willing to see children follow in her footsteps. Nor do I shudder at the prospect. Dick Turpin may have been corrupt; Robin Hood, a thief; Napoleon. a maker of wars; but those were not the only elements which went to make their character, All possessed courage of no mean quality. All fought for what they thought right, which is surely what we are doing these days; and the best proof that "real truth" was their

pivot of action is that they have been remembered and honored for so many ages. A person whose every characteristic we could admire would not be human.

Robin Hood stood as much for fair play to the weak and oppressed as he did for knavery; else why should he on pain of arrest take from the rich to feed a poor, strange woman, or why risk his own limb to restore to Allan a-Dale his young bride, who had been spirited away to marry a rich old man against her will? This did he and more. Would not Robin Hood refresh us mightily were he to appear even now?

Miss Blake has spoken of Lang's fairy tales. I am sure she means only to warn us against accepting as wholesome *all* of them—in fact, *all* of any author's work merely because he may be well known. The only safe basis for selection or for interesting children in real literature is by knowing books—by having read enough in our own youth of the folk-lore, legends, and classic tales to give background, to lend elasticity to our adult judgment and scope for imagination. And we must continue to read what we would have the children read, not with a sense of "ought to," but because we wish to. The best books for children are those that are acceptable to both adults and children. Grown-ups never care for garbled versions—we take the unmodified whole.

The making of selected lists for every year has been suggested. Miss Blake has frankly said that the teachers should know books better. To that end normal schools have been shaping their courses here as well as in the East. Of course, prescribed courses of reading are good; but shouldn't many of the books so read have been a part of one's unconscious development in childhood, and the reading in normal school be merely a review? It is an endless chain, but it can be worked back in the life of every individual to the influence of some lover of the child and of literature for literature's sake. Therefore, teachers and those of us in library work who enjoy bringing the right book to the right child at the right time must have both a book sense and a child sense. Mothers, relatives, teachers, librarians, all have a part in the forming of the reading habit. Here, as always, example is most potent. We must know books!

In closing, may I remind you that we in the library stand ready to help you whenever possible. The matter of reading and selecting books for the children's departments in libraries all over the country is fast falling into the hands of experts who do know books. Miss Moore in New York and Miss Burnite in Cleveland—to mention only two of many—have had long and varied experience.

Perhaps if I tell you briefly of how the work in New York is organized and carried out, as an example only, you will find that help is nearer at hand from your own libraries than you think.

Miss Moore is the supervisor of children's work. There are forty branches in the New York public library, in each of which there is a children's department in charge of an assistant especially adapted to the work. Her first duty is to know books, and in co-operation with the supervisor and librarian to select the books for the juvenile collection. Miss Moore is, of course, our authority on selection. The best work in the children's rooms is along suggestive rather than prescribed lines. By having the carefully selected collection and assistants with a knowledge of books and a wholesome interest in children, the introduction of one to the other is quite natural. The children's librarian is always at hand to suggest a choice. A teacher has asked if much reading is done by children which is not the direct suggestion of their work in school. A great many of their interests are awakened in school, of course, but thru the freedom to browse their natural tastes are appealed to and many do independent reading. This habit we foster so far as is possible, especially by reading aloud to small groups of children and by telling stories to larger groups. In these ways we can awaken desire to read in the minds of even the indifferent. On the other hand, whenever we find signs of over-reading, we try to influence toward moderation.

There is one other department of the library which makes still more careful work possible. Each branch has a school assistant whose duty and pleasure it is to know the

teachers of the district and to help them in every way possible in their own reading, as well as with books for their classes.

When Edison was asked, recently, if he thought invention could be taught, he said, "Yes." One of the surest helps to himself, and he advised it for others, was the reading of any literature which stimulated the imagination. Is that not, after all, the finest use of books?

Miss Katherine D. Blake.—If in my opening remarks I said anything that could be construed as meaning opposition to fairy tales, let me contradict it emphatically. I object, not to fairy tales, but to the *wrong kind* of fairy tales. Nothing could be more beautiful than the old folk-stories. They all teach courage and truth and the fundamental virtues. No one appreciates more thoroly than I the gift of imagination. I am inclined to think it is the best gift of the mind. It lies at the root of all sympathy: science herself accomplishes little unless imagination companions her. But it must be a *trained imagination.* It is our duty to see that no hours are wasted on false ideals that must be lived down as the child grows, or that may never be lived down, as is the case with our money-mad financiers of today. We must not give our children fairy stories merely because they are fairy stories, but because they are the best and most beautiful stories that can be found; stories with world-truths in them, and world-morals; stories that shall show them that courage and truth and love are the guideposts to happiness.

Our children should also be guarded against the vice of over-reading—and it is a very real and dangerous vice. People who read to "pass the time away" deaden their faculties and squander the hours that are so precious if rightfully used. Librarians ought to watch the children who change their books too frequently, and talk with them and communicate with their parents; for a surfeit of reading dulls the mind just as a surfeit of food lays low the forces of the body.

The imagination of the twentieth-century children should be developed first by the world folk-stories gathered from all sources—Scandinavian, German, Russian, Japanese, African, as well as English; then on thru the Arthurian legends, and the stories of chivalry and nobility in the history of the past, till their eyes are opened to the poetry and romance of present-day life and to the civic responsibilities that shall be theirs ere long.

So I pray that you librarians, with your intimate knowledge of what children like on your bookshelves where they have freedom of choice, will come to the aid of the teachers by selecting a tiny library of the best dozen books for each year of childhood—twelve books that shall touch children's hearts the round world over, north and south, east and west, Occident and Orient, and make a bond that shall bind them with the same lofty ideals into the worldwide brotherhood of man.

HIGH-SCHOOL LIBRARIES

ETHELWYN H. FAGGE, LIBRARIAN, POLYTECHNIC HIGH SCHOOL, LOS ANGELES, CAL.

Should a group of librarians be asked, "What form will the greatest development of your work take in the near future?" some might answer "A closer tie between the schools and their sister-institution, the library, that it may become more truly a live branch of the educational system." Teachers, also, from their viewpoint might reply to the same question in a like manner—that among the developments of their work would be the greater cultivation of appreciation and judgment, the building up of a discriminating sense of the printed page, and, more than all, the laying

of a foundation for a literary taste which will reject the sensational and vulgar, and which will be a never-failing source of knowledge, inspiration, and delight.

The children's librarians have done and are doing a large share of this work; their department in the public libraries is usually attractive and well equipped; they stimulate the imagination of the child by story-telling and in other ways, and the publishers cater to the sense which they have awakened. Co-operation between the grammar schools and this department has always been more or less efficient, but when the child leaves the grammar school and enters the high school, apart from formal teaching, his literary sponsors seem to abandon him. He finds in the library no department to suit his years; he is, or ought to be, past the interest in juvenile books, and he is simply bewildered in the main departments without special guidance; this guidance he may possibly find, but he knows no definite place to go for it. In the school he probably finds several hundreds or thousands of volumes, which are not, according to library science, well looked after; he uses the books in a haphazard way for his class work, and with little, if any, pleasure—the reading for literature's sake is often overlooked. It is only the exceptional student who gets anything out of such a library, and the overworked teacher has not the time to foster the latent literary desire in the others. To revise the parable—it is the ninety and nine who have gone astray and need to be brought into the fold.

These grades, then, which are formed of students between the ages of fourteen and twenty years—the most important years for laying the foundations of judgment, when the clean, sensitive plates of the brain are ready to receive clear impressions, all of which will go to make the mature man or woman; when they are ready to put away childish things and begin their real intellectual life—these grades have received hardly sufficient attention from teachers and librarians in the matter of books and reading.

It is so seldom that library people have an opportunity of speaking to a number of educators on this point, on which hang all our hopes, that here I feel I am the mouthpiece of all my comrades in saying that the first, the most important, and the really essential step forward in making this work the great force it might become is the recognition by the principals and teachers of the absolute necessity for it.

We know that unless library instruction is given, students in their tenth and eleventh school years often do not know how to use a dictionary properly; that they do not understand what the lettering on the back of the encyclopedia volumes means; that the "contents" of a book is invariably mistaken for the "index," and that the many short cuts to information are closed to them. Surely one of the keystones in the arch of efficiency is a knowledge of the literature of one's subject, and we cannot help the student more strongly than by showing him early how to use books; how to judge,

as quickly as may be, their worth, and to encourage him to form the habit of going directly to authorities for a solution of old problems, that he may the better put his energies to work on the new ones.

A mere collection of books is not a library in the modern sense of the word. A modern library is not only the storehouse of knowledge, but its distributing point, and we cannot find a dépôt more ideal or more logical than a high school. A library in a high school is a place where all that is taught in class can be driven home; where all that is hinted of in the routine of lessons can be amplified and enlarged upon; where the half-formed desire for further knowledge can be fostered and satisfied, and where the student can step naturally and as soon as possible into his heritage of the ages. This is the atmosphere which those keenly interested in the library movement are anxious to see within the environment of every student; they realize that thereby they can give him something which no ill fortune can take away, and which—thanks to the library spirit in the land—can always be exercised.

Tho it does not yet seem that educators all over the country have awakened to the possibilities of this work, still many who agree that it is worth doing are daunted by the practical difficulties in the way of its accomplishment. Perhaps it is that these difficulties have not been squarely faced, and a consideration of plans in operation in various places may be helpful and lead to their being put into practice elsewhere.

In Cleveland the school libraries are owned by the board of education and administered by the public library; they report this arrangement as being satisfactory, and certainly the schools must gain very much in having the benefit of a trained helper, with the mechanical work done at head-quarters by experienced workers. Many arrangements on this idea could be made, and would be feasible almost anywhere.

One place reports that the city librarian oversees the work of a student assistant. Tho not ideal, this plan would relieve the situation and be a link between school and library.

In towns where the board of education already has the management of the public library, or where the public library is on the school grounds, affairs are simplified; tho even in these places, strange to say, we do not find adequate provision for the high-school student.

In some places the public library, or a branch of it, is domiciled in the school building; this plan, judiciously managed, can give the results we most need—a library atmosphere in the school—and also can serve both ends of the educational system.

The public libraries in many cities, anxious to enlarge their boundaries, have tried to carry on the work in the same manner as with the grammar grades, and to supplement the class work with lists of references on various subjects; they have been ready to lend to the teacher an almost unlimited number of books; however, except in the case of a small place, we find that

this plan has not been satisfactory, either to teacher, librarian, or pupil. Librarians often do not understand the need of the teacher in his work; they are inclined to be diffuse in their presentation of a subject, to be anxious to put before the student all the resources of their institution, instead of concentrating on the point needed by the teacher; also, they have not the time for individual attention to a small group of patrons. Distances often frustrate such a plan as this. The time and exertion required is not to be spared either by teacher or student.

In some cases the teacher himself chooses his references and works with his students in the library; this is hardly ever done regularly or systematically—the tax is too great. There are brilliant exceptions to this last statement, but they shine the brighter by reason of contrast.

This plan of what I may call "loose co-operation" has been tried thoroly in Chicago, where Mr. Legler, the librarian, speaks enthusiastically of the work accomplished; but he agrees that it is a temporary measure, and that there should be a librarian in each high school. Recommendations to that effect have been made to the board of education and it is one of their plans for the future.

In Los Angeles we seem to be working on the same basis as in New York City. In three of our high schools we have librarians as members of the faculty; our libraries are "self-contained" (as a real-estate man might say), our books are bought by the board of education and the whole system maintained by them; their organization is identical with that of a small public library, the methods the same, and we have a clientèle which many small libraries would be happy to boast. We strive to make our rooms the most attractive in the building, and as unlike classrooms as possible; here it is, we think, our students must find rest and relaxation as well as concentration. There are many details of management which are not yet perfected; we labor under disadvantages of bales of red tape in the matter of buying books; we have legally no sanction for being, and are classed among mops and brushes in the matter of purchasing supplies, but we have always had the most loyal support from our superintendent and principals, for which we cannot be too grateful, for that alone has made possible the amazing growth of the work. Of course we have not had enough money to care for our young towns of two thousand people each, but we cannot but be gratified at the work which is done in those rooms day by day.

This bare outline of plans and ideas will show which would be practical elsewhere and which could be adapted to local needs and conditions. Almost anywhere something can be done systematically.

The one point which is obvious in the reports on this situation received from all over the country is, that no really satisfactory work is done without a librarian; in going over them, I think they show, no matter what they say, that the opportunities are not embraced unless given into the

hands of one whose duty it is to study ways of helpfulness. For years we have heard the talk of library training in the normal schools and colleges; as yet we do not see results, and perhaps the reason that it has not made more headway may be because, tho the simpler principles of each profession are necessary to the other, both have their separate functions, and one must dominate the other in any one person, and in consequence a teacher is a teacher by his first intention, and his library work is not of vital importance. Can we expect to have this work thoroly done if it is added to the teacher's account, or the principal's secretary gives out the books in addition to her clerical duties? Each looks on it as a duty of supererogation, and tho he may on that score look for extra rewards in the next world, this world does not receive the service it should have.

In order that this work, which I think you will agree is worth doing well, should reach its fullest usefulness, the library in the school must be thoroly organized. The books must be properly classified; we must have a charging system which the students will respect; we must have a catalog adapted to their needs; we must have the *Reader's Guide*, and the many other aids to easier and quicker reference; and, that all these technical aids may be used to the best advantage, we must have instruction given in the simplest forms of library science. With all this we must have a veiled discipline which will not allow the freedom of the room to be abused. Besides all the foregoing, the librarian should feel herself directly responsible for the literary welfare of the school—a herculean task and an ambition perhaps too soaring—but to stimulate and interest the student in books outside his required reading is one of the things she feels a part of her duty and pleasure. Without doubt this is work enough and more for one person, but the library spirit will sustain the true librarian and she only needs the co-operation of the teachers to make her have what our friend Mr. Roosevelt calls, "a bully time."

To the high schools of California we believe our new County-Library Law is to be of immeasurable value. Judging by its recent progress the time is not far distant when every county will maintain its library and every school that wishes to do so may take advantage of its provisions. Then each school, no matter how large, how small, or how isolated, will by right share in a fortune of books. It is inspiring to consider that a worthy student in the smallest district will then have absolutely the same opportunities for good work as one belonging to the best-equipped school in the land, for his chain of library facilities will begin with the school's small collection, adequately analyzed and made useful thru the county and state libraries, to the Library of Congress itself. Teachers, when they realize its import, will be as enthusiastic as we librarians are over the possibilities of its usefulness. By this plan they will have all the expert help and advice they need in selection, the details of buying all taken from their shoulders and given into experienced hands—to those who will know

the best editions, best markets, and who will make one dollar go 50 per cent farther in consequence. Just the very best material that is published and just what they want will come to them from headquarters, classified and catalogued, ready to be made the best possible use of. All this will be invaluable to any school, but it promises to add to the capabilities of the librarian in the large high school. To have a mind free from the cares of accessioning, classifying, and cataloguing means that she is free to spend her time with Johnny Jones and Sarah Smith, encouraging that little growth of literary desire to put forth leaves, and helping them the better to comprehend their lessons in English and history.

Combination is the watchword of the times, and by bringing this idea to bear on the high-school library situation in California we expect to meet many of the disadvantages which have been obstacles in the progress of the work heretofore. Economy, greater resources, larger funds, and standardized equipment will all come out of this scheme, and for these reasons it must commend itself to school boards; to students and teachers it means adequate facilities for good work.

Tho we are not prepared to admit that this plan can take the place of the school's own librarian, we think that until all schools see the necessity of that member of their faculty it can help and encourage and "nurse" the work. It can prevent what—to librarians' eyes—are crimes in the matter of buying books, and encourage that gentleman, the subscription-book agent, to find another field of action. A book agent told me in triumph the other day that he had sold three hundred dollars worth of books to a high school. "What did they buy?" I asked. "O, sets of all the classics," he answered, airily. I suppose the poor children in that school have an opportunity to read all of Bulwer-Lytton's novels, and in the sets I presume there is only one copy each of *David Copperfield*, *Oliver Twist*, and *Ivanhoe*. I myself have seen an edition de luxe of Swinburne in a high-school library!

We are quite persuaded that in California the libraries of the high schools need our care, when we learn by the 1910 report of the commissioner of education that there are one hundred and eighty-one thousand volumes belonging to them; these books, we feel, are not giving all the help that is in them to teacher or to pupil, for lack of adequate attention. I venture to say that the eleven thousand volumes in the Los Angeles high schools are serving their ends better than one hundred thousand of the rest, for each of our school libraries gives something to over five hundred people every day.

The county library is not only sure to put at your command greater resources of material, thru larger funds and facilities, but it also hopes to make thoroly useful the books the schools already own.

We cannot foresee all the minor ways in which this law will help, but one whose worth might be overlooked is that by this means we can co-

ordinate methods; we can make familiar to hundreds the simple methods of library work; they are simple, but unusual to many people. The card catalog, which is a bugbear of the public but the rock of salvation to the library worker—this technical thing which is as simple as a dictionary to use—is confusing to many now; if we can accustom students to the use of this, we shall help them somewhat when they find themselves in a large library.

By this law one can see in imagination the school in the country place becoming the educational center of the community, for not only will it aid the children, but logically it would become the cultural center for the adults; and is not that our aim, that everyone should be working side by side for educational development, some farther up the hill than others, but all the slopes crowded with students?

Librarians are, if anything, methodical, and the criticism that they sacrifice inspiration to method is often well taken, but perhaps it is also fair to say that teachers, generally speaking, lack system; is it not possible that we may, by touching each other's work more closely in the future, each learn something from the other, and each make our work more useful to the community for which we both labor?

We shall then serve all the people all the time.

DISCUSSION

W. H. Housh, principal of Los Angeles High School, Los Angeles, Cal.—As the principal of a high school that has a library and a trained librarian, I wish to indorse all movements to increase the efficiency of school libraries.

A properly selected and well-managed library is indispensable to every high school, not only for easy and speedy acquirement of information, but for the training given in learning to use the analytical outlines prepared by the teachers and posted on the walls. This training has proved valuable to them when they have gone to college or when they have undertaken research work in professional libraries.

We take our new pupils to the library at the beginning of each term and explain to them its working and its advantages.

New books are all read either by a teacher or the librarian before they are placed on the shelves. While our books are mainly reference books, some fiction, both standard and modern, is furnished. An important feature is the list of periodicals consisting of monthly and weekly magazines and reviews. These are afterward bound and, used in connection with the *Reader's Guide*, are among our best and most frequently used reference books.

Besides being a comfortable place with facilities for reference, the library should be the art center as well as the literary center; it should be a workroom, of course; but it should be the most artistically furnished room in the school.

We have student assistants who are given instruction in library economics and who in return give valuable help to the librarian. These assistants are given credit toward graduation.

Our librarian, as well as the others of our city schools, had several years' previous training in the public library in Los Angeles. The librarians have made themselves indispensable. The board of education has recognized their worth by making their salaries equal that of high-school teachers of two years' experience. No high school

can afford to be without a skilled librarian. The ideal condition is a library with a trained librarian holding a teacher's certificate. The certificate will give the librarian standing and adequate salary.

The alternative is the common practice of having a teacher of English or history in charge of the library. Such a teacher seldom has ample time to perform the duties. Moreover, she needs a course in library economics, both for the technical knowledge necessary for the proper handling of the books and for the library spirit which inculcates a love for the library atmosphere.

Much is expected from the new County Library Law of California. Its supreme importance is owing to the fact that it will provide expert advice and assistance in the choice of books and in the best methods of distributing and using them. It remains for the teachers, and especially the principals, to make the most of the opportunities afforded by the new law, which provides such timely and such valuable aid to the libraries.

CALIFORNIA COUNTY FREE LIBRARIES

HARRIET G. EDDY, COUNTY LIBRARY ORGANIZER, STATE LIBRARY, SACRAMENTO, CAL.

The old order changeth, giving place to the new. Churches are being institutionalized, and the individual is learning the lesson that he is his brother's keeper. Playgrounds in the city are offering a substitute for country life. In education, nothing is more significant than the present move to break from the old order of things, to popularize and humanize education. The work of Madame Montesorri in Italy in the school of childhood is phenomenal. The open-air schools, or "cold schools," and the schools for abnormals in Chicago are splendid in their conception and results. The movement in Virginia alone for increasing the possibilities for secondary education is remarkable. And the ideal of all open-minded educators is fast becoming the attainment of character, rather than success; the acquisition of wisdom rather than knowledge.

In California the most vast and mighty change from the old order to the new is along agricultural lines. Endless tracts of land, "Spanish grants," where formerly grew world-famed fields of grain, are being broken up, thousands of acres at a time, into colonies, and settled by people bent on intensive farming. As a consequence, California, the second-largest state in the Union, is fast being filled with numberless small communities, centering in thriving villages and young cities. The effect on both branches of education, the school and the library, has been significant. The school is solving its difficulty thru the union district school, the union high school, and the county high school. The library is meeting its obligation of a complete library service to all people by the organizing of county free libraries.

This movement is acknowledged to be perhaps the biggest in library history. Its presentation to you today is justified for several reasons: because it deals so intimately with school work and school libraries; because it is a move to help better the community by providing a well-supported reading-room, and the teacher who is not interested in the com-

munity is not worthy the badge of his profession; and, finally, anything "library" is educational, and is its own excuse for being here.

We have passed the time when we should call for co-operation between library and school. We have come to the time when the library should be a living, pulsing part of every school organization. Indeed the library, to use a literary comparison, is, or should be, the enveloping action of the whole drama of existence. It amuses the baby with his picture-book before he is even able to read. It gives the growing child his fairy stories, myths, historical stories, and healthy books of fiction. It furnishes the supplementary and research material for the high-school pupil and the college student, or the opportunity to read and study to those cut off from scholastic work. It provides the scholar means to continue his research; and opens its doors, to the end of old age, to all seeking recreation.

In order to bring about this ideal of complete library service to all the people, the California State Library has for years been striving to improve library facilities. This could not be done thru the municipal library alone, as the majority of the people live either entirely beyond reach of the municipal library or in a town too small to support one. And it could not be done thru traveling libraries, which offer only makeshift service at best, with too many communities to be served successfully from one state center.

So the county was adopted as the unit of library service. Tho the oldest one in California is scarcely three years old, they are far beyond the experimental age, and are looked upon as inevitable and a wonderful success. They are developing possibilities which even their staunchest friends scarcely foresaw, and which are winning enthusiastic support from all parts of the state.

The law making California county free libraries possible is an enabling act, permitting boards of supervisors (who are our county governing bodies) to establish them and provide for their maintenance by a regular tax. They thus become free libraries for all the people of the county, but do not include towns already supporting libraries, unless they wish to be a part. A person trained and experienced in library work is made county librarian, under whose supervision the work is developed to its highest possible degree of efficiency.

The headquarters of the county free library are at the county seat, and branches are placed in every community center, so that reading-matter will be completely accessible as often as a person goes to his marketing place.

California has innumerable small towns, many of which have tried to maintain reading-rooms, but always have the same dire results: inadequate support, which is subscribed by a few public-spirited people; scant supply of books; untrained caretakers. Under the county plan the reading-room is maintained by the county fund, magazines are supplied, books are exchanged as often as the community has finished using them, additional

ones may be called out from the county free library and from the State Library, and a custodian is in charge, under the careful supervision of the trained county librarian.

In all parts of the state, the establishment of county free libraries is going rapidly on, and bringing in their service most satisfactory results. Counties that a year ago had no libraries within their border are now serving hundreds, even thousands of people; communities that a few years ago complained that the boys had no place to go but the saloons, now have attractive and well-maintained reading-rooms; schools that not long ago were limited by their puny supply of books, now have an endless opportunity to secure supplemental books for their classes, to be used the month or so that the subject is taught, and then returned to the central library, subject to call from another community. This benefit that the county free library is to the schools is one of its most significant features. Here in California, high schools are rarely known to have enough books to supplement the use of their classes. They often have access to only the supply of their own library, which consists at most of the purchase of one hundred dollars worth of books a year—not enough to replace the wear and tear of each year. By co-operation under a county system, where each school has access to a large central library, and by a judicious arrangement of the demands in the various schools, so they will not all come for the same material at the same time, each school can have the use of many times the books it has had, with even less cost to the county. Some high schools have had during one year the use of over two thousand dollars worth of books, where they had formerly been able to spend on their own library only seventy-five dollars or one hundred dollars each year.

The district schools of the various counties are also seeing that by co-operation they may have a much better service for the children, and save money by the plan. Schools usually buy very extravagantly, either because a young and inexperienced teacher does not know how to select and purchase books, or because the school trustees fall victim to the wiles of a book agent —or both. The county system is offering the districts co-operation in any and every way. Some districts are even transferring their library fund to the county librarian who will make the selections and purchases, building up a school library, which will be circulated in sections to all the co-operating districts. Thus each school will have the use of many times the usual books, for their own money will be judiciously spent, and they will have the use of the other fellow's books as well. The life of the book will also be longer, for it is a rare thing to have a schoolbook mended; but under the new plan the books will be under frequent scrutiny at the central library, and kept in prime condition. Books that also have a mysterious way of disappearing during the long summer vacation will now be carefuliy guarded, and taught better habits.

I could continue indefinitely on the possibilities for good in the working

out of the county free-library plan. It is vast in its conception, but proving still vaster in its realization. It is bound to make for itself a permanent place in the history of educational development, and will be a powerful means to the end that all people should have informal opportunities of education and recreation provided by a perfect system of library service, just as is already coming from its more formal and elder sister, the school.

DISCUSSION

L. W. Ripley, librarian, Public Library, Sacramento, Cal.—Much has been said and written on the proper relations between schools and libraries, and the stream of language still flows on. Much has been accomplished in the line of bringing schools and libraries into active co-operation, but instances of successful work in this direction are not many. The suspicion cannot be avoided that sometimes the feeling that they are being imposed upon is felt by one or the other of the high contracting powers.

To banish this suspicion from the mind of either party, it would be well to set definite limits to the responsibilities and duties of each. Let us suppose, for instance, that it is the business of libraries to select, collect, and distribute books; and that it is the province of the schools to teach the use and love of books. Under such a segregation of powers each party will do the work for which it is by training and equipment best fitted. Schools, as a rule, are not overly successful in the management of libraries, and while libraries claim great virtue as educational institutions, their success is due more to the instinct and school training of their readers than to any compelling force the libraries can exert. Here we have a definite basis for co-operative action: the schools produce the readers and book-lovers, the libraries supply the books. If the libraries are to supply all books needed within given territories, then all the library resources of these territories should be placed at the disposal of these libraries, thereby preventing waste of funds and energy, and securing better distribution.

How shall this managing library be selected? It must be a library with the machinery and the disposition to handle the work efficiently and liberally. It may be state, county, or municipal, as local conditions shall determine, but whichever is chosen to bear the burden, must be armed with power and backed with resources to bear it well. Under California conditions, the county library seems to afford the appointed means. This system is in a measure a leaf from the book of "big business." It combines and centralizes, removing authority from the smaller political units and placing it in the larger unit. The complete development of the system involves the expenditure of much larger sums than were ever spent within the same limits before, but the increase in efficiency is proportionately much greater. It is just a matter of adding something to your capital and running expense, and gaining an increased profit on the whole investment.

Too much money has been spent in the past—I am speaking of California conditions—too much has been spent in the past on school libraries for the good that has been done; too little money has been spent to cover the work there is to do.

Dr. Bostwick of the St. Louis Public Library has covered this question of library work with the schools very completely in *The American Public Library*. He says:

> Every educational institution should have a library of its own, for its own purposes. Every primary and grammar class, as truly as every great university, ought to have its collection of books. But if this collection be expanded to its widest possible limits, it will inevitably be found that duplication of the work of the public library is going on. Here arises the first necessity for an agreement between the two institutions regarding the limits of the respective spheres. Libraries have generally looked upon the plan adopted by the city of Buffalo as most satisfactory. Here the school and classroom libraries are limited to books of reference used directly by pupils in the preparation of their lessons; and even these are selected under the supervision of the public library.

For everything in the nature of supplementary reading the school depends wholly upon the library—either upon the stock on its shelves or upon collections lent to the school or classroom for its use. This makes the school a deposit station or point of distribution, so far as its own scholars are concerned. In some cities this Buffalo plan has been modified, or adopted only partially or temporarily, but as a proper division of labor between school and library it is probably unsurpassed.

Under this plan, it would appear that the school recognizes the library as the proper institution to manage library affairs, while the library looks to the school to furnish it with a permanent and ever increasing supply of readers.

DEPARTMENT OF SPECIAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—Frank G. Bruner, Department of Child Study, Public Schools.....Chicago, Ill.
Vice-President—Elizabeth E. Farrell, inspector of Ungraded Classes.....New York, N.Y.
Secretary—Francis E. O'Donnell, State School for Deaf and Blind.....Berkeley, Cal.

FIRST SESSION—Tuesday Forenoon, July 11, 1911

The meeting was called to order in Pavilion Rink by President Frank G. Bruner, and an invocation was given by Rabbi Nieto.

In the absence of the secretary, Miss Olive Thomas Powell was appointed secretary *pro tempore*.

The topic for the session was "The School Laggard." The discussion was opened by Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.

Following Mr. Pearse's introduction, papers on the subject were given as follows:

"Separate Schools with Separate Courses of Study for the Separate Needs of Our Children," by S. L. Heeter, superintendent of schools, St. Paul, Minn.

"Causes of Backwardness and Mental Deficiency in Children, and How to Prevent Them," by Henry H. Goddard, director, Laboratory of Research, New Jersey Training School for Feeble-Minded Children, Vineland, N.J.

"Can We Eliminate the School Laggard?" by G. W. A. Luckey, head professor of education, University of Nebraska, Lincoln, Nebr.

SECOND SESSION—Wednesday Forenoon, July 12, 1911

The meeting was called to order at 9:30 A.M. in the West Side Christian Church by the president, Frank G. Bruner. A series of papers on the topic "The Conservation of Vision" were presented.

Mark D. Stevenson, M.D., Akron, Ohio, presented the subject, "What Can Be Done to Prevent Blindness in Children Under School Age?"

The care of children's eyes after entering school was discussed in the second paper, "The Hygiene of Vision," by F. Park Lewis, M.D., chairman of the Committee on Conservation of Vision, American Medical Association, Buffalo, N.Y.

"School Activities in Relation to Children's Eyes," was presented by J. A. Shawan, superintendent of schools, Columbus, Ohio.

The discussion of the subject was opened by Edward M. Van Cleve, superintendent of Ohio State School for the Blind, Columbus, Ohio. He was followed by M. P. E. Groszmann, Plainfield, N.J; Mrs. A. S. Rowan; and Leonard P. Ayres, associate director, Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.

F. Park Lewis, M.D., chairman of the Committee on Prevention of Blindness and Conservation of Vision, appointed by the president of the Department of Special Education at the meeting in 1910, announced that the following persons had been serving on that committee during the year:

F. Park Lewis, chairman of Committee on Prevention of Blindness, American Medical Association, Buffalo, N.Y., *Chairman*.
J. A. Shawan, superintendent of schools, Columbus, Ohio.
W. H. Burnham, professor of psychology, Clark University, Worcester, Mass.
E. N. Bristol, secretary, Henry Holt & Co., New York, N.Y.
E. L. Elliott, editor, "The Illuminating Engineer," New York, N.Y.

A partial but nevertheless encouraging report followed. Dr. Lewis reported that the co-operation of the American Medical Society and the Russell Sage Foundation had been obtained and that a nation-wide movement has been inaugurated. He showed the proof copy of the first magazine just published by the Society for the Prevention of Blindness and Conservation of Vision, a society which was partially the result of the Boston meeting.

The following resolution was presented by C. S. G. Nagel, M.D., secretary of the California Society for the Prevention of Blindness:

WHEREAS, At the Boston meeting of this department a committee of five to investigate the relations of the teaching profession to conservation of vision was appointed; and

WHEREAS, Said committee of noted experts, consisting of an ophthalmologist, a city superintendent of schools, a publisher of schoolbooks, a psychological investigator, and an illuminating engineer, has done a year's initial work, promising most useful results, as indicated in a partial report made this day to the Department of Special Education, be it

Resolved, That the committee be requested to continue its activities, and that the Committee on Appropriations of the National Education Association be requested to provide for the expenses incurred in the work done during the past year and to appropriate the sum of one thousand dollars for the necessary expenses of this Committee on Prevention of Blindness and Conservation of Vision for the ensuing year; and be it further

Resolved, That we approve the suggestion that a day be set apart in the fall of 1912, to be known as Conservation of Vision Day, and pledge the department's influence in making the day a notable occasion of public instruction on the care of the eyes.

This resolution was seconded and carried unanimously.

The president appointed a committee on nominations as follows:

Edward M. Van Cleve, superintendent, Ohio State School for the Blind, Columbus Ohio.

Mrs. Alice F. Holden, San Francisco, Cal.

Leonard P. Ayres, associate director, Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.

THIRD SESSION—FRIDAY FORENOON, JULY, 14, 1911

The meeting was called to order at 9:30 A.M. in the West Side Christian Church by the president.

The topic for the session was "Exceptional Children," and three papers were presented, as follows:

"Legal Provisions for Exceptional Children," by Maximilian P. E. Groszmann, educational director, Association for the Study and Education of Exceptional Children, Plainfield, N.J.

"What Constitutes a Subnormal Child and to What Extent Can He Be Trained?" by Vinnie C. Hicks, special psychologist, public schools, Oakland, Cal.

"The Physiology and Psychology of the Deaf Child," by Charles D. Lowry, district superintendent of schools, Chicago, Ill.

The discussion was opened by Lewis M. Terman, professor of education, Leland Stanford Junior University, Stanford University, Cal.

M. P. E. Groszmann made a motion that the chair appoint a committee to prepare a petition in the name of the Department of Special Education to the Bureau of Education, asking that it collect data relative to the legal status and provision for atypical children thruout the United States. The motion was carried and the following committee was appointed:

Maximilian P. E. Groszmann, educational director, Association for the Study and Education of Exceptional Children, Plainfield, N.J.

Harris Taylor, principal of Institution for Improved Instruction of Deaf Mutes, New York, N.Y.

Leonard P. Ayres, associate director, Department of Child Hygiene, Russell Sage Foundation, New York, N.Y.

The Committee on Nominations reported as follows:

For *President*—John W. Jones, superintendent, Ohio State School for the Deaf, Columbus, Ohio.

For *Vice-President*—M. P. E. Groszmann, educational director, Association for the Study and Education of Exceptional Children, Plainfield, N.J.

For *Secretary*—Miss Carrie B. Levy, supervisor of classes for the blind, Milwaukee, Wis.

On motion the report was adopted and the nominees were declared elected.

The meeting then adjourned.

OLIVE THOMAS POWELL, *Secretary Pro Tempore*

PAPERS AND DISCUSSIONS

THE SCHOOL LAGGARD

CARROLL G. PEARSE, SUPERINTENDENT OF SCHOOLS, MILWAUKEE, WIS.

(Synopsis)

The laggards increase in numbers as the schools grow. Conditions do not fit the children and the children do not fit the conditions. The relation of those who drop out and those who fall behind is close; the dropping out is often caused by the very fact of their having fallen behind. Our problem is to keep the backward ones in school.

We must study the causes of failure—the inability to learn, lack of application, poor home conditions, and poor teaching.

The question is also an economic one. If one-fourth, one-third, or one-half of the children repeat the work it means a great loss in money. It will take three teachers to do the work of two, and this presents a serious question in school economy.

Laggardism may be caused by overcrowding in the schoolroom; or the work may be too difficult; or the teaching may be poor. The upper-grade work is apt to be too heavy and too much is expected of the pupils. The object in some schools seems to be to make easy the work of the high schools. High schools should be held responsible for their own work and carry their own responsibility. Courses of study should be arranged to fit the ability of the average normal child.

Nearly all children are good and capable and can do work under proper conditions. Individual help should be given in the case of each individual studied, to prevent lagging. When a teacher notices a child losing interest she should look into the matter at once and not wait until the end of the term.

In smaller schools the supervision can be more carefully done. Some plan should be devised to assist the backward. In some schools the Batavia plan is followed. The speaker prefers the individual-help period. The wise teacher can do much in this period. Arrive, if possible, at the cause of failure—the missing motive. Find the cure for it, then apply it.

The deadening process of keeping back those who could go on and do more work is another side of this question. In some schools the better pupils are put into separate classes. I consider this unwise; it tends to make them conceited, and often overstimulates.

Foreigners who are too old for the grade should be given special attention and frequently re-graded as their development or progress requires.

SEPARATE SCHOOLS WITH SEPARATE COURSES OF TRAINING FOR THE SEPARATE NEEDS OF OUR CHILDREN

S. L. HEETER, SUPERINTENDENT OF SCHOOLS, ST. PAUL, MINN.

This subject is expressed under three heads: first, separate schools; second, separate courses of training; third, separate needs of our children—a threefold subject. The fundamental consideration, however, is not the first, the schools; not the second, the courses of training, but the third, the needs of our children.

The greatest responsibility resting upon the schools of America today is that of recognizing first of all the separate needs of our youth, and then the responsibility of providing special schools and special training to meet those needs.

There has been no educational advance within the past ten years except toward the child, and there can be no advance in ten years to come—no advance in educational theory or practice, in the organization of our schools, in the development of curricula, in methods of presentation—no advance in education which does not recognize the child and his individual needs.

The American schools in the past have developed on the democratic theory that all children are equal, and should have equal opportunity; the American schools of the future will develop on the extended democratic idea that all children are not equal, never have been, and never can be.

To my mind the investigations and reports of the Russell Sage Foundation have brought to light the most striking inadequacy of the public schools of America. This private foundation has encouraged a nation-wide study of the individual child, his school progress, and his needs; and it has made teachers, school authorities, and patrons everywhere more considerate of the vast army of American children, who, year after year, become misfits in our educational scheme. This nation-wide study of the failures of our children to make normal progress, the problem of retardation, the clogging of our educational machinery, the waste product in the loss of pupils, the accumulative effect not only upon the schools but upon the youth of this land, and upon subsequent manhood and womanhood—all have brought before the American mind one of the largest problems of the day, a problem not only educational, but social, and civic, and economic as well.

We have developed a scheme of education in this country, truly public and national: we have opened our five hundred thousand schoolrooms; have extended our school year from three to ten months; have passed compulsory educational laws; and have attempted to force a minimum of education upon every American child whether he will or not. Yet it is now dawning upon us that our progress has been along academic lines, that we have developed our schools on the pedagogs' side; that our aim has been intellectual; that we have worked almost exclusively with books and brains; and that the under half of American children have failed to keep pace in our school courses, have found themselves at the age of fourteen and fifteen in the fourth, fifth, and sixth grades of our elementary schools, behind time, overaged, overgrown, arrested in their development, awkward and embarrassed in the presence of younger children, discouraged, irregular in attendance, threatening truancy, applying for labor permits, and finally leaving the schools in large numbers with less than a common-school education, only to find the humblest places in the ranks of toilers.

The National Education Association, in its meeting at Boston last year, opened its declaration of principles with the following resolution:

> We declare our faith in the schools of the Republic, believing that it is impossible for the citizens of a democracy to develop in power and efficiency without the common schools owned and controlled by the people.

Faith in the schools of the Republic! Impossible for the citizens of a democracy to develop power and efficiency without the common schools owned and controlled by the people! Here is still America's unsolved problem in education. It is the problem of developing power and efficiency in the citizens of the democracy. It is a problem for her common schools, the schools owned and controlled by the people.

The supporting public has been prone to throw its criticisms at the feet of the American teacher, and to make her and her methods the scapegoat of the inadequacy of the schools, but I am here today to maintain that there is still something narrow and unbalanced in our educational aim; still something weak in the organic structure of our system. For as long as there are natural differences in human beings, as long as the state compels by law the crowds to assemble in common classrooms, and calls upon the teacher to carry all thru the same curriculum, to equalize the unequal, and to bring all up to uniform scholastic attainments; as long as the schools for the majority are dominated by the idea of the schools for the minority, just so long must the state lay the blame upon itself for the failure of its schools, and not upon the half-million teachers of this land.

The American public cannot much longer deceive itself with the theory that because we call our nation a democracy, a republic, a United States, there results a certain equality of our children—an equality claimed for no other children in the world. The problem of Europe may be to reform

her caste schools and eliminate forced conditions of society, but the problem in America is to recognize natural differences in human beings, and then so organize her schools that the child who is scheduled for six years of school life and an humble calling shall be given the training that is his, and not the education that belongs to the child with the high school, the university course, and a profession before him.

Let them raise the cry of caste—that's the cry that we must hear in education—class differences, natural and acquired. Separate schools and separate courses of training for the separate needs of our people will not accentuate caste. Already in the modern high schools one boy pursues a literary course, another the manual-training, another the commercial, and so on. There we have learned to estimate with equal dignity and appreciation all honest effort, whether it be from the cobbler's son in the shop courses or the scion's in the classical. It remains for us to carry this same spirit of intelligent differentiation into our elementary schools and provide as effectually for the majority for whom education is a duty as we have already provided for the minority for whom education is a privilege.

The problem of the development of power and efficiency in the citizens of a democracy thru a system of popular education must be met first of all by an extension of our democratic aim in education, by the realization of an aim that will meet the needs of every child and the whole of every child; an aim that will be as much concerned about the health of a boy as it is about his head, as much concerned about his hand as it is about his heart.

It may call for a certain reorganization, reconstruction, readjustment of our elementary schools, but it calls first for a fuller recognition of the fact that there is no one routine of schooling that can possibly give all children alike that maximum of development of which they are severally capable.

The boy whose head is in his stomach and cannot rise much higher *must* receive a different treatment from the boy whose head is in the clouds and cannot come down much lower.

It should mean, first of all, a recognition of the physical needs of our children; more regard for the heating, ventilation, and care of school buildings; more regard for sunlight, fresh and pure water in every schoolroom; for systematic courses of physical culture every day and every year of the child's school life; for the periodic physical examination of every child by which bodily ailments and abnormalities that defeat school progress may be discovered, reported, and corrected; and then more regard for school lunches, looking toward a supply of wholesome food for the underfed children in every city.

But this is not all; the separate physical needs of our children call for the establishment of special schools of health, schools for children with exceptional bodies; open-air schools for our pale-faced anæmics and oxygen-

starved mouth breathers; fresh-air schools for all tubercular children; and special corrective courses for all physically abnormal.

The several intellectual needs of our pupils call for the isolation of the exceptionally dull and the exceptionally bright, schools for children with exceptional brains. An ungraded room, for example, or coaching room in every school building of ten teachers or more, where backward children may be brought up to grade and our strongest may be helped forward; also a special school for the weak-minded in every district of one thousand children to relieve our regular teachers of mental defectives—drags in every schoolroom.

The social and moral interests of our youth demand at least one special room of discipline for every five hundred children; schools for children with exceptional hearts; schools that will relieve our teachers of juvenile delinquents, habitual truants, and incorrigibles.

The vocational needs of our youth call for special elementary industrial schools in every city—schools for children with exceptional hands. While the traditional courses may continue to serve best a large proportion, we must set aside in every large building one room with an adjoining shop for our backward youth destined to fail in books and forced by circumstances or choice to go early to work.

The first five or six grades in our elementary schools must always offer the basic training to every child; a broad basis of general culture and intelligence. These grades must always remain the school for folks in America, the schools for the masses and classes alike, but we shall never meet the urgent needs of our industrial workers until we break away from the single uniform course for all, and offer a certain class of children over fourteen a parallel course of instruction, not the one looking toward the high schools and the professions, but another toward the occupations, trades, and industries.

There is no break here with sound learning. This does not mean that the day of liberal culture is past, that gentle manners, classic style, and literary appreciation are supplanted by bread-winning methods. It does mean, however, that the culture aim in education is no longer sufficient, and that our common schools are confronted by a new demand, a demand made by the spirit of the modern world, that a common-school training shall prepare for service in the world life.

The fact is, there is still a lingering mediævalism in too many of our schools, taking as its ideal worn-out conceptions of culture. The making of a cultured life was a sufficient aim in the days of academic seclusion, in the days of Greece with its dominant, slave-owning oligarchy; but we live in America, and we are called upon today to train American boys and girls in an industrial democracy, and we must recognize that our system of universal education succeeds only as we focus our school activities upon the concrete needs of each child enrolled in the American schools.

This does not mean that education has lost its elements of idealism.

It is only an expansion of idealism. There is not much value in knowledge or culture for their own sake. There is no such thing as individual excellence detached from human activity. Mere goodness is abstraction. No man is good unless he is good for something. What the world needs today is young men and women graduating from our schools with the capacity to do well something that the world wants done.

I realize I am dealing today with an administrative problem, a problem for school boards, superintendents, and the supporting public. There can be but one objection raised; it is the usual cry of expense. We hear talk everywhere about economy in school administration, but I maintain the greatest economy in education is yet to come, and it will come only as we meet the needs of the less fortunate half that now clogs our educational machinery. For as long as we crowd our basement rooms, hold half-day sessions, and congest our lower grades with an army of repeaters; as long as we obstruct the line of progress up thru our grades by educational requirements beyond the capacity of the lower half; as long as we hold to the intellectual lockstep and exact the same quality and quantity of intellectual work from all, regardless of varying capacities and needs; as long as compulsory educational laws require pupils to sit in our schools a certain number of years whether they make progress or not; as long as we handicap our teachers by a system which forces upon each one a half-room-full of laggards, so long will the state fail to realize an equivalent for its public expenditures in education.

Now what is in the way? There are no legal obstacles. It requires only a public awakening. New conditions are already teaching us new duties. Our eyes are already open to the dawn of a new era in education. The day will soon come when the American business man, the American manufacturer, the American wage-earner, in the face of an ever-increasing rivalry for possession of the world's new markets; when the American teacher whose life is burdened and energy misdirected in her efforts to interest the dullard, truant, and delinquent in culture programs; the father and mother in the country and town whose sons and daughters go wrong under the demoralizing influences surrounding low-grade child labor; educational authorities engaged in the uphill business of compelling attendance of the masses in schools which do not meet their needs; municipal authorities who seek to reduce juvenile idleness and crime; and the state that spends its public funds almost too late on jails, reformatories, and penetentiaries; all religious organizations that aim at civic righteousness; the body politic that stands for private and public liberty—all will unite in a free and unanimous support of separate schools, with separate courses of training for the separate needs of our children. This is the step that promises America success in its great international struggle for educational, civic, and commercial supremacy, and above all, this is the step that promises to plant eternal hope in the heart of every American boy and girl.

CAUSES OF BACKWARDNESS AND MENTAL DEFICIENCY IN CHILDREN AND HOW TO PREVENT THEM

HENRY H. GODDARD, DIRECTOR, LABORATORY OF RESEARCH, NEW JERSEY TRAINING SCHOOL FOR FEEBLE-MINDED CHILDREN, VINELAND, N.J.

Few persons realize the great changes that have come over the educational world both in material and methods during the past fifty years. Those who are old enough to remember the earlier conditions seldom have time to turn their attention back and make comparisons. The younger generation, not having experienced the older condition, seldom think about it except as attention may be turned to it from an occasional glimpse at the history of education.

Time was in the memory of some of us when the country boy went to school in the winter, ciphered thru the arithmetic, learned to read in the fifth or sixth reader, to spell at the spelling bees, and perhaps added a few accomplishments such as geography and possibly a little algebra. And having gone thru the allotted number of years, he acquired enough, either in the school or thru his experience with life in the various farm occupations, to enable him to have a farm of his own and work upon it, thereby earning a living and filling his place in the world.

If he went to town he was able to transact whatever business he needed to transact—most people being reasonably honest and not inclined to take advantage of him even if he were somewhat ignorant and inexperienced.

The city boy or the boy with better opportunities and higher traditions in his family was of course sent to better schools and received a more elaborate training which might end in the college or the professional school, but if he did not show an adaptation for this, there was always a place for him and he was able to get along very comfortably in the world and take his place and make some sort of a living.

Now all of this is changed; we have our graded systems and we even have our rural school systems, and, whether they are graded or not, we have an elaborate course of study and know fairly definitely what a child should do each year and even each month in the year. So if the boy does not progress as we say he ought, we are immediately met by the difficulty of having a dull or backward child in our schools, and our problem is, What can be done with him?

There is no longer a place for him when he leaves school to go to work unless he has some sort of school certificate. Indeed, the number of places which require even a college diploma, or at least a high-school diploma, is continually increasing. As someone has said it used to be that "any fool could be a farmer," now it is that many people are not wise enough to be farmers. So the positions open to the boy who has not made fairly good progress at least thru the grammar school are becoming more and more rare.

To the economist, all this only means the old law that as competition becomes greater the more important become the shades of difference between individuals. Whereas in the past there was room for all and work for all, and whether a boy was bright or dull there was always something that he could do, today competition in all business and all life is so strong that the individual peculiarities and differences often amount to a serious matter. And the boy who comes to be recognized as dull in school finds it difficult to secure work by which he can earn a living.

In looking about for the causes of this inability to earn a living we find there exist varying degrees of mental ability and there is a dead-line below which one is incompetent.

Looking again to the past for an illustration, many of us will remember the time when little attention was paid to those boys and girls who were just a little deaf or just a little defective in eyesight. It was found after a good while that they did not learn well in school, they were unable to reproduce what had been taught by the teacher or what had been demonstrated on the blackboard. Some years ago it was discovered that these children were partially blind and had not seen clearly what was on the blackboard or had not been able to read aright what was in their textbooks; others of them were a trifle deaf and had not heard clearly what the teacher said and consequently were unable to understand the explanations that were given. We then turned our attention to the examination of all children, and the world was startled by the facts when it was found that somewhere from 10 per cent to 35 per cent of children were more or less deaf or more or less defective in eyesight. Out of that has grown to a large extent the school physicians, the eye clinics, the ear clinics, and so on thru the many lines which the school physician follows.

Now, just as there are persons in whom the eye is a little defective or the ear a little defective, so there are persons in whom the brain is more or less defective, and who have not the intelligence (and never can have) that their more fortunate brothers and sisters are provided with.

While these children in an earlier and simpler form of life might be able to learn and do enough to make their way in the world, especially if their needs were not great or if their relatives assisted them somewhat, in these days of stricter competition, in these days of machinery requiring judgment for its management, in these days when the hundred and one occupations which used to be performed upon the farm are now performed in the shop and the larger part of farming and other industrial work is done by machinery, it requires a higher degree of intelligence than formerly and these children who are just a little below the line in mental ability are no longer able to take their part in the world.

The same complicated educational system which compelled us to discover the partially blind and deaf has compelled us likewise to become aware of those who are partially endowed mentally, and so it comes about

that one of the greatest problems before us today is the problem of children who are endowed with low mentality. They cannot do the regular work of the school; they are recognized as dull or backward, or in extreme cases as feeble-minded. First it was thought that these children were bad, and indeed there are yet some teachers who think that the children who do not keep up with the class are willfully negligent or careless and that they could if they would, but the day of such views is fast passing. We are coming already into a condition of things where any teacher who does not look first at the mental and physical condition of the dull child is recognized as a back number.

The child that does not do his school work to the satisfaction of his teacher should be an object of study and not the recipient of a scolding. When such a study is given, it is found almost always that the child is dull for reasons that are beyond his control; that someone else is responsible for his failure, and not he himself.

Now these dull children divide themselves into two main groups: first, those who are dull and backward from causes of temporary action that may be removed, and having been removed, the child may progress at a normal rate, or at least at a rate sufficiently rapid to enable him eventually to become a respectable and useful citizen. These constitute nearly 15 per cent of the school population. There is the other group of those who are endowed with a brain too poor even to enable them to have sufficient judgment to manage their own affairs satisfactorily in any society as complicated as that in which we live. These are the feeble-minded. They are more than 2 per cent of the school population.

The two ought to be sharply diagnosed and differentiated, for they are as different as measles and smallpox, and it is as important to note the difference as it is in these diseases. Like these two diseases, it is sometimes in the beginning hard to differentiate; and like them, too, in one case it is harmless and the patient will recover, in the other it is likely to be fatal and nothing can save him. Indeed, this is absolutely true of the feeble-minded.

As has been said, the causes of backwardness are local and temporal; they may be such things as malnutrition, defective sight or hearing, adenoids, a misfit, even such a thing as taking up a study before the mind is prepared for it, or anything that temporarily blunts the child's ability to do the work that is prescribed for him. Indeed, we may go farther than that and say that there are children of such slow development physically as well as mentally that the things that we assume that they ought to do because they have arrived at the age of six or ten are as far ahead of them as tho we had asked them to do the things which were suitable for a child of eight or twelve. Just as you can make a child bow-legged by insisting upon his walking before he is ready, so you can spoil him for almost any subject of study that you like by putting him into it before his mind has

developed to that point; and just as the bow-legged condition once produced will always interfere with his walking and can only be corrected by very special attention and outlay of money and effort, so the child made backward by being placed in the wrong class to start with is very difficult to overcome, and backwardness will impede his progress at all times unless very definite measures are taken at a good deal of expense of time and money and effort on his part. We have learned to send the child that is physically below par—that is, crippled or disabled or deformed in any way —to a specialist. In the same way we must come to the position where our one thought when we discover a child that is mentally below the average will be that he must go to the specialist, too. That specialist is the psychologist or the teacher of the special class.

But if we have discovered a case of smallpox and not measles—that is to say, if the child is feeble-minded rather than simply backward—we have quite a different problem. The feeble-minded child is born with a brain which does not develop to the point where he can exercise enough reason and judgment to enable him to take his place in any society that is as complicated as that in which we live today.

Now, this condition can be discovered in school. (The method of detecting and differentiating him I leave for another discussion in another section of this Association.)

The causes which have produced this type of defect are many. One has but to read the older literature on the subject to be impressed with the fact that we not only believe that there are many causes, but it is also evident that we are very largely ignorant of what these causes are, and the percentage of cases in which the different known causes act.

Recent studies have led us to make at least one very sharp differentiation—that is, between those cases where the mental defect is a truly hereditary matter and those cases in which it is the result of causes acting in the form of acquired characteristics.

In 65 per cent of all cases of feeble-mindedness there is feeble-mindedness in the parents or in the grandparents or somewhere back in the ancestry of the child; in the other 35 per cent we have various forms of disease and accidents and injury. Most of these are in a general way well known to all, such as the after-effects of scarlet fever, spinal meningitis, and perhaps other diseases; dangers, difficulties, and troubles at the time of birth; certain causes that act upon the mother previous to the birth of the child. All of these give rise to a defective brain which can never develop to the point at which it can function normally. Whatever the cause, all of these cases of feeble-mindedness are incurable. They are helpless and hopeless so far as their ever being normal is concerned.

Nevertheless, there are certain kinds of training that they may receive and under the influence of which they may be made happy and somewhat useful. They will not become an absolute burden upon the community,

altho relatively so. So much for the causes of backwardness and feeble-mindedness.

But I am to speak to you also on the prevention of these conditions, and this is a much more difficult problem. It is evident that in regard to the 35 per cent of feeble-mindedness that is due to what we may term "accidents," whether it be of disease, or fall, or injury to the mother or to the child at time of birth, the only prevention for that condition of things lies in greater care which shall prevent the accident. This would in many cases undoubtedly depend upon a greater knowledge and skill on the part of the medical profession, by which the conditions in the parents which underlie the production of a defective child would be better understood and therefore prevented.

The method of preventing the 65 per cent of hereditary cases is manifest without discussion. It is only to prevent their being born. It is merely a question of time when the general public understands the tremendous hereditary force in this particular that we shall take the necessary steps to prevent this type of feeble-mindedness.

When we understand that if two feeble-minded persons marry, all of the children must be feeble-minded; when we recognize that when one parent is feeble-minded the probabilities are that half the children will be feeble-minded and that if the other parent is alcoholic the chances are that all of the children will be feeble-minded—it is only necessary, I say, to understand this to make us resolve that such people shall not marry.

Not only that—we must go farther and either provide homes for such people where they can by no possibility procreate their kind, or else we must by surgical interference make it impossible for them to perform that function.

This is the answer to the question, How shall we prevent 65 per cent of feeble-mindedness?

Turning our attention to that part of the subject which is of immediate interest to the schoolman—because it is his problem, the one upon which he can work—we are led to ask, How can we prevent the backwardness in children? The first step toward a prevention of the condition is to recognize it. As I have said in an earlier part of this paper, it has taken us a long time to recognize that this was a condition over which the child had no control. Now we are able to recognize backwardness at an early age. As the result of the studies of a Frenchman, Professor Binet, we are able to diagnose the case as early as three years and find out whether the child is normal or subnormal, and to what extent he is subnormal or backward.

Having recognized the case, we have before us, as was said, a case for the specialist. If everything has been done that can be done to improve the child's condition, then it only remains for us to fit the child to such an environment as he is able to function in. We must not put him in the

class with the normal child, because, not being able to make normal progress, he is sure to become quickly discouraged, and discouragement is fatal to all effort, either in child or adult, normal or subnormal. He must, then, either have individual treatment or be placed with a small group of those who are like himself. We have yet to work out and solve the problem as to how many of these backward children a teacher can properly handle. We are sure fifteen is the upper limit. It is more than likely ten is nearer the truth.

But we, of course, are not satisfied to simply pick out these backward children and put them together in a small class. Each child must be studied and the cause of the backwardness in his particular case determined, if possible, and removed. If it is a case of adenoids and tonsils which have in some mysterious way sapped his vital energy, they must be removed; if it is a case of malnutrition, then that must be looked into; if it is malnutrition due to actual lack of nourishing food, food must be provided; if the malnutrition is due to a failure to assimilate the food which has been provided in plenty, then it is a case for deep study by the physician; if it is due to defective sight or hearing, then those conditions must be examined and if possible remedied.

In conclusion, let us look for a moment at conditions as they might exist if we were to take this matter in hand and act upon what we know.

In the first place, it sounds most encouraging and something like scientific education to say that we will examine all children as they come to school and determine, then and there, their actual mental status, and that we will separate them into the precocious, or supernormal; the normal, or average; and the subnormal, the backward or feeble-minded; and that we will treat each group as its condition requires instead of, as formerly, herding them all together and giving them the prescribed average course, whether they are able to carry more or less. And were I a prophet, I should be willing to predict marvelous consequences as the result of this early classification of our children in accordance with their mental ability.

To begin at the top, the removal of the precocious children into special classes where they shall be given food sufficiently strong for their exceptionally good endowment will in itself be of untold benefit to the average child, because it is the precocious child of the public schools, quite as truly as the subnormal child, that disturbs the even course of events in the classroom. The precocious child is able to do the work you set for the average child in half the time that the other can do it; the other half he has left in which he may do anything that occurs to his fertile brain. If he is of a certain temperament, he will of course use that time quietly and calmly, with no disturbance to the teacher or other children, but more often he is restless and uneasy and he quickly turns to those things nearest his hands, and that may be something either annoying to the teacher or to the other children or injurious to himself.

Now, once remove him from the regular grade and put him in a group where he is given enough to do and we not only save the disturbance in the regular class but we save that child's own intellect if not his soul. At the other end, as already implied in what has been said, to remove the feeble-minded and then the backward children from the class will save the tremendous drag which every teacher feels from the presence of these children, and the average normal child will then go on undisturbed and do his work in the regular way, receiving his share of the teacher's attention, which he never does receive as long as there are one or two or three defective pupils in the room.

I am going to anticipate the usual objection that is raised to such a classification as I have suggested—namely, that it is so extremely expensive that we cannot afford it—by making a suggestion. Possibly it is not feasible, but it seems worth considering. While I do not admit for an instant that the cost of giving special training to those special pupils should stand in the way of doing it, and while I stand emphatically for the view that nothing is too good and no expense too great to bestow upon normal children, nevertheless, if the matter can be evened up and we can do just as well by these children without materially increasing the expense, there certainly is no objection to doing it.

Now, it seems a fair question whether, if we remove from the regular class those who are precocious at the one end and those backward and defective at the other, a teacher may not be able to handle even a larger class than we now allow. In colleges and in departmental work in the high schools one teacher now instructs a much larger group than we allow in any single-grade room. It is true that we are dealing with older pupils, who are able to get more from the lecture and from the methods of instruction used with a large group than the very young children could do; nevertheless I submit whether it is not possible that with the two extremes, which I have enumerated, removed, with a group of average children of good intelligence who are keeping up with their class, where the interest may be maintained, some of the methods in vogue even in college could not be carried on with reasonably satisfactory results? I have no doubt that the results would be more satisfactory than they are now with the mixed group that constitute a grade. If this is possible, it will be no small item toward the solution of this problem from the material standpoint—because it is no small problem when we recall that 4 per cent of school children are precocious and 2 per cent feeble-minded, while 15 per cent are backward. Altogether these groups make at least 20 per cent or one-fifth of our school population that must be in classes which are at least not more than a half or a third as large as those we now have.

Whether this suggestion will prove practical or not I cannot say, but it is certain that the special class is coming, and before long we shall grade our children on a scientific basis.

Think of turning back to the old ungraded system in any of our city schools! Give a teacher forty to sixty children of all ages and ask her to produce results! We look back upon it as upon the Dark Ages.

Yet we do what amounts to the same thing when we give a teacher forty to sixty children with a range of four to seven years in mental age and ability.

May the day speedily come when this shall savor as much of the Dark Ages as the other.

CAN WE ELIMINATE THE SCHOOL LAGGARD?

G. W. A. LUCKEY, HEAD PROFESSOR OF EDUCATION, UNIVERSITY OF NEBRASKA, LINCOLN, NEBR.

This question is larger and more serious than may appear on first statement. The treatment of the laggard is an important problem of the nation. It is one of the pillars on which the civilization rests. Unfortunately the speaker has no expert knowledge to bring you, neither is he able to present the first or the last word on the subject. The first word has already been spoken by men and women of deep conviction, and we are by no means ready to give the last word, even were it possible in a twenty-minutes paper. What I hope to do, therefore, is to present a few phases of the subject which seem to point toward a solution.

Who is meant by the school laggard? What is the cause of his existence? Is he essential to the civilization, or simply an accident of it—a misfit?

We are apt to think of the laggard as the boy or girl who falls behind in his school work—the slow child who requires more than the usual time to complete the grade, or who is above the normal age for the grade. This is only partially true. The real laggard is the one who is always behind no matter what the field. He is short in every direction or completely out of adjustment. The so-called school laggard is short in a few lines but may be the leader in others. A laggard under one teacher may be the leader under another. In some lines we may all be laggards while probably but few are laggards in all lines. Hence the term laggard as we use it is only relative and has special reference to the system under which it develops. The meaning of the term is vague and can scarcely be made more specific in our present state of knowledge, or rather want of knowledge.

Holding in mind the more accurate meaning of laggard, I shall use for the purposes of discussion the meaning commonly accepted, i.e., the school laggard is the one who is behind in his studies or above the normal age for the grade.

When we begin to study the subject we realize how meager and inaccurate the statistics are. There has been no general plan. Each community is a law unto itself and the statistics gathered are often without meaning or purpose. These statistics later find their way to the United States

Bureau of Education, are published and scattered. But they lack coherence and without a general plan are of little or no value. Of late years several commendable efforts have been made to interpret and find a use for this annually recurring body of school statistics. One of the earlier monographs of special note was written by Dr. Edward L. Thorndike of Teachers College, Columbia University. It was entitled "The Elimination of Pupils from School" and published by the United States Bureau of Education. One of the more recent and best publications on the subject, entitled "Laggards in our Schools," is by Professor Leonard P. Ayres, of the Russell Sage Foundation. The purpose of this book is, I judge, to give a working hypothesis for gathering and interpreting school statistics. We may not agree with the details but any plan is better than no plan. Besides, this seems to be as feasible a plan as has yet been suggested. I am indebted to this work for many of my thoughts on the subject.

Turning to the conditions of our schools as we find them, about one-third of the children in the public schools are above the normal age for the grade, hence they are classified as retarded. If all children attended school regularly and were promoted as regularly there would be found in the eighth grade about 87 per cent of the number in the first grade. But owing to the failure to make grades with the class and the frequent stopping out that occurs after thirteen, the number that finish the eighth grade is only about one-third or at most one-half of those who started. The number who remain to complete the course in the high school is at best not more than one in ten.

On the average, 16 to 20 per cent of the children fail from year to year to make the grade with the other members of the class. These become repeaters, going over the same work the second year, or becoming discouraged leave school. This number becomes cumulative, occupying space, using the time and energy of the teacher which belong to other pupils. Mr. Ayres in expressing this thought says:—

> Of the entire membership 5 per cent have reached their present grades in 86 per cent of the normal time; 55 per cent have reached their present grades in 100 per cent of the normal time; 40 per cent have reached their present grades in 128 per cent of the normal time.

He states further that

> The average child in the average city school system progresses thru the grades at the rate of eight grades in ten years.

thus becoming retarded to the extent of two years in eight. The effect of such repeating when estimated in dollars and cents is surprisingly large, but that is the smallest item in the loss. The greater loss is the retarding effect it has on the civilization and the cumulative effect on inheritance.

What is the cause of the school laggard? Here the want of knowledge is one of the most noticeable features of the study. The past ten or fifteen years have been exceedingly fruitful in acquainting us with the laws of life

and the nature of the individual. But man is more than a plant or an animal, and as we ascend the scale of life the organisms become more complex and their operations more intricate. Besides, knowledge to be of service must be distributed, perceived, accepted, utilized.

Among the causes that seem to stand out most prominently in the retardation of children are:

1. Ignorance and indifference on the part of parents.
2. Short and irregular attendance.
3. Late entrance.
4. Bad physical conditions, i.e., physical defects, poor health, sickness.
5. Bad mental conditions, i.e., want of balance, slow to perceive, weak to retain.
6. Bad environmental conditions, i.e., overcrowded, poorly ventilated, insanitary rooms, lack of playgrounds, shops and laboratories, and lack of proper stimulus.
7. Lack of interest, bad habits of study, absence of suitable ideals.
8. Poor teaching and unnecessary discouragements.
9. Bad inheritance, unredeemable defects—physical and mental.

There are other causes, no doubt, in producing the school laggard, but these are the ones most frequently mentioned. It will be seen that most of the causes are removable, and thru the slow processes of conscious evolution all of them may be removable.

I believe with those who say that as our schools are now constituted, it would be better for the boy and girl not to begin school life until eight or nine. But for children of that age to be placed with children of five or six is bad pedagogically and morally for both classes. This is equally true whether the disparity of age is the result of late entrance or failure of promotion. What might be done with a room full of beginners all nine years old is no criterion of what can be done with a dozen nine years old in company with twenty or thirty six years old, others five years, seven years, and eight years.

In some of the large city school systems there are many more retarded children in one district or building than in another. This often happens in buildings wherein the environmental conditions seem to be similar. On this point Mr. Ayres says:

> In the investigation in New York, in some cases nearly twice as great a proportion of the children were retarded as in neighboring schools where external conditions were identical.

This seems to point to remedial conditions of the teaching or of the requirements for promotion.

While a large number of the children are classed with the laggards because of late entrance, there are twice as many more who become laggards because of slow progress. The latter belong more truly to the class of laggards, and they are the ones who more often stop out without completing the course. The lagging seems to increase as we ascend the grades, reaching about one-half of all the children from the fifth grade on.

In many schools where the number of repeaters is large the number in

the eighth grade is correspondingly small. Many children enter upon the school year several weeks or even months behind the time scheduled for starting, and not infrequently the same children stop out before the session is over. It does not stand to reason that such children can do the required work of the grades and be promoted unless they are overly bright. Even then they must interfere out of proportion to their number with the efficiency of the school.

We are apt to think of the school year as nine or ten months in length. But to the average child, on account of non-attendance, it is probably under rather than over six months. Because of the unstable condition of many parents, removal from schools may often be necessary; however, most of the irregular attendance is avoidable and when overcome will eliminate many cases of retarded development. Even so important causes as ill health and physical defects, to which probably 10 per cent of the retardation belong, can be in part if not wholly removed. This is true of many other causes.

Is the laggard essential to the civilization or merely an accident—a misfit? If not essential we can eliminate him as soon as we understand the laws that govern his existence. Nature despises a useless organism and when acting alone will prevent its continuance thru the survival of the fittest. If the laggard is not useful to the civilization, why does he continue to thrive? Have we here the working or the interference of a new force—a force not of nature but of mind? Under the operations of the purely physical laws the survival of the fittest holds, but in human actions there seems to be a new force which often interferes with the full expression of nature's laws. If these forces are working in harmony the evolution is rapid, if in discord there is little or no progress. Education is becoming more and more conscious evolution. Man thru intelligence takes hold, as it were, of the great forces of life and molds them to his needs. In doing this he must understand both forces and shape the lower to the higher—the physical to the spiritual.

Instinct is a better guide than partial intelligence, but it fades into insignificance when compared with complete intelligence. In the light of intelligence, instinct is frequently found to be perverted and destructive of itself. In the matter of the laggard we seem to have reached the stage of partial intelligence—a cartoon stage where it is neither the one nor the other, and where the appearances are somewhat exaggerated. Seen in this light the problem of the laggard becomes an exceedingly complex one controlled by many forces, some of which are subtle and not understood. But the problem is by no means a hopeless one. Human intelligence is equal to the task.

Great help has been given toward the solution of the problem in the past few years by students of biology, especially the experts in the breeding of plants and animals. By means of selection and hybridization he is able to

evolve new plants. But he finds himself limited in the process within very narrow lines. He can make use of fortuitous variation but he must wait for nature to produce them by laws he does not understand.

It is difficult under the best conditions to control inheritance, and this problem lies at the foundation of the school laggard. Parents whose heritable characteristics are bad cannot hope to produce the best children. In the breeding of plants and animals we are careful in the selection and give every opportunity of environment. But much as we love our civilization, in the breeding of men we are densely ignorant and criminally negligent.

We are aware of the close relation existing between the physical and the spiritual. The laws of the former are beginning to be understood, but the latter is seen in only the dimmest outline. In the main, like begets like. Insanity generates insanity. Imbecility begets imbecility. Degeneracy produces degeneracy. Criminality produces criminality. Hence to eliminate the laggard often means to change the inheritance.

Sometime we will perceive and appreciate the importance to the nation of having every child conceived and born under the best conditions—conditions of life and health, and not those of death and decay. No greater service can be rendered any civilization than that which betters the inheritance. In a democracy, every man has or ought to have the liberty to perpetuate good, but no man has any inherent right to perpetuate evil. Besides, the truest, the deepest, and the most lasting happiness is not that of physical pleasure, but spiritual—not changes of the body but changes of the soul.

Since a large number of school laggards are the result of physical weakness due to heritable characteristics, they may be prevented in the future by a cleaner and more intelligent parenthood. But even under the best conditions that we know there are likely to be the physically weak and incapacitated. The expert horticulturist in planting a grove, selects with the greatest care his stock. He tries to have a pure strain, uniform trees, and similar conditions of environment. But a very few years are sufficient to change conditions. Some of the trees have thrived, others have not, some are true to name, others are not. The trees of the orchard are no longer uniform. It is probable that these changes are due to definite laws which if understood might be controlled. However, the child in its inheritance is more complex than the tree and the laws of its growth are less understood.

It does not seem that the laggard is essential to the civilization, but rather an accident. At present our knowledge of the laws of heredity is too limited to give us complete mastery of the situation. Under the best conditions there will probably be from 3 to 5 per cent of the children physically incapacitated for the school work demanded of the normal child. These will continue to be a burden on the civilization—receiving more than they return.

Besides the laggards due to physical weakness or inheritance, there is a larger number due to psychical weakness or environmental conditions. The latter under favorable conditions may be largely, if not wholly, eliminated.

One of the weaknesses of our present civilization is the tendency to early specialization. Efficiency in any line before sixteen or eighteen is apt to mean fixation in a narrow field and consequent arrest of development. It would be far better for the civilization if no child were permitted to enter the commercial world to work for wage until after sixteen. It would be a great saving to the nation to protect all children who need protection during the formative period when they are constructing the character that is to shape their future. For all racial purposes the balanced mind is the best mind, and the growing child should be given opportunity to develop many-sided interests.

Every normal child ought to complete the full requirements of the elementary school. This is absolutely essential to citizenship, to parenthood, to commercial life, and to the minimum enjoyment of the social life. Such a requirement should be demanded by every state and community. It is in a large measure attainable when we eliminate the laggards who have fallen into a class to which they do not belong.

In conclusion, I believe that of the 33 or more per cent of laggards now found in the average school system, two-thirds can easily be eliminated by promotion, and in time at least 15 per cent more can be eliminated in the same way. To do this we must observe more carefully the laws of inheritance; we must establish better home and school environments; we must adapt the subject-matter of the school to the immediate needs and interests of the individual child; and last but not least, we must better the teaching. We must have teaching that vitalizes and awakens the soul to the richness of life about it; teaching that truly educates and fills the learner with a desire to live always, to live truer, and to live purer.

THE PREVENTION OF BLINDNESS IN CHILDREN UNDER SCHOOL AGE

MARK D. STEVENSON, M.D., AKRON, OHIO

Family units formerly banded together into larger units chiefly for religious, social, military, and commercial purposes. Crime was punished as a retaliatory measure, not specially as a protection for the public, with little or no inquiry into its real causes and consequently with little success. The insane were punished with practically no cures; now with proper care there is a large percentage of recoveries. This is also true of past and present methods of treating inebriates and minor criminals. Truancy more frequently requires the removal of tonsils and adenoids and the proper use of lenses than of the lash. Juvenile crime greatly

disappears when poverty is replaced in nature's hospital with good food, open air, sunshine, and playgrounds. The better understanding of questions relating to public health brought about during the last few years shows that the health of a community is chiefly dependent on the condition of the people who live in the most unhygienic manner. Very much depends on their industrial occupation, housing, ventilation, and cleanliness. Contagious diseases, always present or epidemic, affecting people in all walks of life, are proportionate to the hygienic and social condition of the weakest links in a community. In the complexity of our civilization, in social, and especially in health matters, each individual is important to all; in the interest of good citizenship, therefore, the state is properly becoming more paternal. For its protection, and in order to raise the standard of its citizenship, it has been compelled to undertake the training and education of its children.

The appreciation of the importance of preventing contagious diseases where so many are gathered in one place has resulted in medical inspection of school children. Physical examinations have demonstrated that the attention, intelligence, and success of pupils, always known to vary greatly, depend in large measure on their physical condition. The vision, hearing, and posture of school children, and the ventilation, methods, and frequency of cleaning schoolrooms, have acquired a new interest. The pathologic importance of diseased tonsils and adenoids is now at least partially, appreciated. Health is very important in acquiring an education, and much is now being done to promote more healthful, wholesome conditions among school children.

The strain and evil effects of school work fall very largely on the eyes; a proportionate share of the burden is not borne by the other senses, as nearly all knowledge is acquired, to some extent, by the use of the eyes. Our ancestors used their eyes but little at close range; few of them could read, books were scarce, and methods of artificial lighting very crude. The human eye, like that of nearly all animals, is chiefly adapted for seeing distant objects, as it is possible to see at close range only by a special focusing effort of the muscle of accommodation. Most of the organs of our body are serving now much the same purposes that they have served for thousands and perhaps millions of years, back thru our various ancestors, so that the present greatly increased demands on the organs of vision in distinguishing objects at close range are not evolutionary, but revolutionary, demanding the earnest attention of all concerned in preventing the deterioration not only of these but also, on account of their intimate relationship, of certain other organs.

The power of adjustment of the normal eye to see near-by objects increases up to about fourteen years of age, and afterward declines until, at about forty-five years of age, close objects are seen indistinctly or with considerable effort. Unusual effort, in seeing at close range and in directing

the eyes simultaneously like two gun barrels on exactly the same point, is also required in young children, especially if their vital forces are reduced, as during and after any illness, especially after weakening diseases like diphtheria. Small objects, like letters in fine print or threads in sewing, are therefore unsuited to the young child's eyes. Large letters or other characters on blackboards or charts are less injurious. Teachers know that in order to secure steady, successful work the physical condition and health of children are of the greatest importance. Recognizing this, they have called to their aid various agencies, such as medical inspection, school and district nurses, social workers, child-welfare exhibits, special surgical, medical, and dental clinics.

The examination of children first entering school, however, makes records of many physical ailments and deformities which could only have been relieved or corrected sometime before the child was of school age. The most important period in correcting many physical deformities is very early in life. Before entering school, adenoids and tonsils have often undermined the child's vitality, possibly destroyed, at least partially, its hearing, produced catarrhal conditions, changed the voice, deformed its dental arches, making the roof of the mouth encroach on the nasal spaces, narrowed the face, caused crooked, projecting teeth, pigeon breast, and infected cervical glands, as well as scarred, partially ruined eyes from phlyctenular ulcers. Squinting, crossed or turned eyes should usually be corrected with proper lenses as soon as the squint appears, especially whenever it appears after the first year of life, and often if this is not done until the child is five or six years old the vision in the squinting eye, in its useful relation to the other, is irreparably lost. Certain cases of congenital cataract also require early operation.

It is very necessary that the physical condition of a child entering school should be known, as much may yet be done to correct deformities. If the eyesight or hearing has been partially or wholly lost, however, its late detection is like discovering that the barn door was unlocked after the horse was stolen. The state will have to go farther and have its agents inspect its prospective citizens even before school age, and equally good results in lessening deformities and disease in infants and children will be obtained as already have been secured in lessening infant mortality. Great interest is properly taken in the prevention of cruelty to the lower animals, but a little of the humanity overflowing into antivivisection and other channels, without any study of the wonderfully beneficent results of animal experimentation not only to man, but in the prevention of disease, suffering, and death in the lower animals, especially in valuable necessary domestic animals, can find great avenues for service, not misdirected attempts to be useful, in the care of little children, the most important wards of the body politic.

The eye, like other organs of the body, must be regarded as the resultant

of long ages of evolutionary progress. Wherever found it is specially adapted thru a process of natural selection to the visual necessities of its possessor. Generations of inherited adaptation to environment have resulted in the almost numberless variations between the rudimentary blind eyes of certain fish in the dark caves of Kentucky to the highest developed human eye, with its wonderful capacity for quick, silent fixation and adjustment for distant or near-by objects, with binocular or third-dimension vision. Huxley, years ago, called attention to the optical defects and imperfections of the human eye—as a microscope inaccurate, as a telescope imperfect, as a camera crude, but wonderful because it is all these in one; while it does nothing accurately and perfectly, it does many things well enough for all practical purposes and has the crowning merit, overbalancing all minor defects, of being able to adapt itself to almost every conceivable change of circumstances.

Hereditary blindness, which some deny exists, has recently been given careful study by Dr. Clarence Loeb, of St. Louis. He asserts that less than one in every ten thousand people in any country have hereditary blindness, but that there are twelve forms of eye disease truly hereditary, as well as color blindness and refractive errors, the one of economic importance in certain occupations only, the other capable of being corrected. Nearly the entire range of ocular disease is free from hereditary influences, and people blind from ordinary eye diseases, in marrying present only social and economic problems. Dr. Loeb found, however, that the marriage of a person with a hereditary blind taint to a normal person produced practically as much inherited blindness as if both parents were tainted, and he advocated the prevention of marriage of anyone capable of transmitting blindness. He believes that at least persons with normal eyes or with reduced vision in families tainted with hereditary blindness should be advised against marriage, and parents having two children suffering with inherited stigmata should be warned of the danger to subsequent children.

Attempts to better the condition of mankind have usually met with opposition by those to be benefited. Vaccination has its opponents to this day, and so have the various antitoxins, serums, and vaccines of more recent acquisition. Progressive ideas and legislative activities at first meet active opposition, then receive passive obedience, and finally, axiomatic acceptance. Prevention is greater than cure. The pharaohs of Egypt married their own sisters. Certain states now forbid the marriage of relatives as near as first cousins. Polygamy has given place to monogamy. Indiana requires that marriage licenses are not to be given to those having certain venereal diseases. Some southern states forbid marriages between whites and negroes. Probably the time is not far distant when fitness to marry will be inquired into more carefully before being able to secure the sanction of the state for such an important contract, and the resulting benefits to mankind will be almost immeasurable.

As a cause of blindness, heredity should not be overlooked, but as heredity usually suggests great difficulties to be overcome, it is encouraging to study its limitations, and not overestimate or overstate its influence. As Dr. Woods Hutchinson remarks, the evil in things always bulks large in imagination and memory; the first conception of the great forces of nature is that they are our enemies. Much is said about hereditary insanity, hereditary diseases, and hereditary defects, but very little of the fact that 99.7 per cent of us are sane and that hereditary powers of recovery and inherited vigor are handed down to us as our greatest birthright from hundreds of thousands of our ancestors who learned how to withstand many violences and adapted themselves to their surroundings. Animal organisms are provided with numerous effective defenses when invaded by bacteria or other injurious foreign substances. Heredity is many times more frequently concerned in the transmission of health than of disease and weakness. Any family or race which tended to inherit defects and injurious characters, especially if serious, would rapidly go down in the struggle for survival and become extinct. This long, million-year battle of the human race against defect and disease has left its monuments to difficulties overcome, its memorials of ancient victories, its honorable scars in various vestigia or remnants which continue to cause some trouble. Among these ancestral and experimental flaws are our vermiform appendix from our herbivorous days, ruptures because we assumed the erect position, our absurdly misnamed, troublesome wisdom teeth from the time when we needed longer jaws for eating and defense, our needless gall bladder, our mostly needless sebaceous glands, our frequent harelips and cleft palates, echoes of reptilian times. All these hereditary impedimenta, however, have probably not been responsible for more than 1 or 2 per cent of the body's breakdowns. It is also interesting to recall that only three decades ago the thyroid, suprarenal capsules, and hypophysis—all vital organs, the removal of which means ruin—were considered as useless remains, so that further study may entirely change the estimated value of certain so-called vestigial organs. Every process fighting disease, every strategic trick against invading organisms, every step in repair after wounds or injuries, is an inheritance. Many of the two lowest classes of backboned animals —fishes and amphibians and most invertebrates—can repair not only a wound, but renew an entire limb, even an eye or head. Each segment of an earthworm forms a new head and tail, a lobster a complete gill, claws, or an eye; a salamander will reproduce a foot, the lens and colored part of the eye, the iris, etc. Heredity is now considered as a comparatively small and steadily receding factor in the production of disease. Only a few hereditary diseases survive, such as certain forms of epilepsy and insanity, sick headache, and possibly alcoholism. These inheritances are ordinarily considered to be unbalanced or defective states of certain parts of the nervous system rather than specific tendencies toward any special disease.

If a prospective mother acquires an acute virulent infection and transmits it to the unborn child, the latter will usually be promptly killed, as in smallpox or yellow fever, but if the disease is mild the child may be infected before or after birth. Such an infection would not be inherited, however, but would be a congenital or acquired disease. One of the most marvelous things in nature is the perfection of the barrier which the mother erects to protect her unborn child against her infections. Preference is given to the coming life, and if the supply of nourishment is inadequate the mother chiefly suffers. Not only are the inherited diseases becoming less important, only a few remaining, but congenital diseases are not considered as important as formerly. Most tubercular children acquire the disease after birth, and this is largely so of syphilitic cases and other supposedly hereditary and congenital diseases. In Denmark valuable tubercular cattle are no longer killed, but are used for breeding purposes, as it has been found that the calves are healthy if entirely removed from the cows and fed on nontubercular milk.

Fully one-fourth of the partially and totally blind are made so by the eyes becoming infected during or soon after birth—"babies' sore eyes." Germs of many different kinds present in the mother's discharges may secure entrance to the eyes and cause a violent inflammation, usually commencing from two to four days after birth, or sometime during the first week of life. This disease, ophthalmia neonatorum, is characterized by swelling, redness, and gumming together of the lids, and by profuse discharge of pus. The most destructive organism which causes the worst of these cases is the gonococcus of Neisser, the cause of gonorrhea. Dr. Morrow, of New York, states that,

> Social tradition holds that it is a greater violation of conventional propriety publicly to mention this infection (gonorrhea) than privately to contract it and carry it home to the family.

If the child's face around the eyes is cleaned with dry gauze very soon after birth, and one or two drops of a proper antiseptic or germicide is introduced into each eye, such as 1 or 2 per cent silver-nitrate solution, and proper care is exercised that no subsequent infection gets into the child's eyes from soiled cloths or dirty fingers, this greatest cause of infantile blindness can be nearly eradicated. The means for its prevention, the possibility of which was first pointed out by Crede in 1882, are so simple, it is strange that all physicians and midwives do not use them, at least in cases where there is any probability of infection. Dr. F. Park Lewis has started a national, now an international, movement for the more constant and intelligent use of a prophylactic for this disease. This movement has recently grown into a wider field for the conservation of vision.

Prompt and proper treatment will usually save eyes suffering with ophthalmia neonatorum, but prevention is incomparably easier, better, and safer. Ulcers or sores of various sizes and depths are likely to form

on the cornea, leaving scars, more or less unsightly, always damaging to vision, and sometimes leading to infection of the eyeball and subsequent loss. Any discharging eye in a child one or two weeks old demands the attention of a skilled physician.

As I pointed out in a paper before this year's session of the American Medical Association at Los Angeles, the number of cases totally blind thru life from this preventable disease, according to Keller, 25.21 per cent of those who enter our blind institutions, and fully one-tenth of the blind in any country, is only a partial index of its evil results. Account must also be taken of the high mortality among these unfortunates, of the disfigured and disabled eyes of a far greater number of others, perhaps totally blind in one eye, scarred on one or both—with defective vision and therefore lessened earning power. It is estimated that the total annual loss from this disease alone in the United States is seven million dollars, and that more than one million dollars annually is spent in partially caring for its victims. The community is said to pay an excess of forty-five hundred dollars during the school life of a blind child. In this and other civilized countries millions are spent yearly to safeguard the public against a few criminals, but even paltry sums are reluctantly spent in preventing diseases and hygienic evils which are responsible for much more misery, sickness, and even death, and which impair the usefulness of many helpless citizens. Parents or guardians are not permitted to abuse their children, and for the protection and good of the state children are compelled to go to school, and are not permitted to do injurious work while of school age. The infant is entitled to protection against preventable blindness.

Syphilis, another great venereal evil, is responsible for a large amount of ocular disease in children. In this disease, not only the clear anterior part of the eye, the cornea, may become inflamed at almost any time during life, but destructive inflammatory changes take place in other parts of the eye—iris, choroid, retina, and optic nerve. Syphilitic keratitis, syphilitic inflammation of the cornea, may not only be very painful, but is usually long-continued, and recovery is slow. It always causes great distress, discharge of tears, and fear of light, and leaves the visual acuity finally reduced by scar tissue in the cornea, and too often by changes due to inflammations in other portions of the eyes.

Space forbids more than a mere reference to a few of the other diseases of children's eyes. Many of them, like phlyctenular keratitis and conjunctivitis, inflammations of different tissues, and various forms of ulcers, with resulting scars, are due to slight injuries, general or infectious diseases, such as tuberculosis, or to depressed states of health resulting from improper or insufficient nourishment, from evil hygienic conditions, or lack of good air, sunshine, and exercise. Considerable infantile blindness results from a preventable disease—cerebro-spinal meningitis.

Trachoma, also called true granulated lids, or Egyptian ophthalmia,

is already a scourge to our foreign element, and in recent years to our natives. A large percentage of blindness, especially in certain cities and states, is being caused by this disease alone. Dr. J. G. Watkins, of Little Rock, recently stated that of sixty-two totally blind pupils in the Arkansas school for the blind, thirty-six were blind as a result of trachoma. The government has adopted a proper policy of rejecting immigrants suffering with this dangerous and repulsive eye disease. It is present in the rural districts as well as in the large cities, and is communicable chiefly thru the use of common towels, basins, and handkerchiefs, against which physicians and teachers should wage endless warfare. On account of its prevalence, as well as that of other contagious eye diseases, e.g., "pink eye," every child should be warned against using the same towel, basin, or handkerchief as its companions, especially when the other children have sore eyes.

Infants' eyes should never be exposed to the direct glare of the sun. In bed the baby's face should be turned from the window, and in its coach the eyes should be protected by a parasol or awning, preferably lined with dark-colored material. Young children should not play with toys that require close inspection; blocks, letters, or picture-books should be so large as to be seen readily at a distance. For a small child, general physical exercise is much to be preferred to the use of the eyes at close range. The improper exposure of little children to strong light, natural or artificial, or the equally harmful early use of books with insufficient, too concentrated, or unequally distributed illumination, is very injurious. The largely preventable Fourth of July accidents and those due to permitting children to play with knives, scissors, forks, and other dangerous domestic utensils, and the horizontally carried umbrella, against which occasionally children run or are forced, are needless causes of accidents to the eye. All these and many other abuses and evils which contribute their share in partially or wholly lowering the efficiency of this most important organ, from an educational standpoint, should receive the careful attention, not only of the teaching and medical professions, but of all those concerned in the moral and intellectual uplift of the citizenship of the future. Every agency should contribute its part. The prevention and cure of infantile diseases of the eye present moral, social, and economic phases which demand consideration of the best means for conserving the vision, not only during school age, but also during the important years of preparation for entering school.

THE HYGIENE OF VISION

F. PARK LEWIS, M.D., CHAIRMAN OF COMMITTEE ON CONSERVATION OF VISION, OF THE NATIONAL EDUCATION ASSOCIATION, BUFFALO, N.Y.

In order that my meaning may be clear, I will premise this paper with a statement of the propositions which it is especially desired to emphasize:

1) That the nation's most valuable asset is its children. All other forms of wealth are of secondary importance, because later it will be thru their efforts that all progress —material, intellectual, and moral—shall become possible.

2) That except for their minds and morals—and both depend in a larger degree than we realize upon their sight—their eyes constitute their most valuable possession.

3) That the present methods of book-study, especially in the large proportion of cases in which uncorrected organic defects are present, not only affect the eyes themselves but retard the normal development of the brain, prolonging thereby unnecessarily the period of tutelage and lessening life's later opportunities.

4) That there should be less close work for the eyes in book-study, note-taking, etc., and more care of the eyes in providing conditions under which they may be used with the least possible effort.

5) This can be secured only by the organized and concerted efforts of great bodies, like those representing the teachers, the doctors, the architects, the illuminating engineers, and, more especially, the parents of the children themselves.

Words sometimes take on new meanings by reason of new conditions with which they are associated. As conditions change, the old words which we must employ to describe the new methods express an additional or a modified thought as a new interpretation comes from new procedures. Our supreme court has just been obliged to recognize this fact in its most recent decision; the interpretation of exactly the same words made by an act of Congress twenty-one years ago is today widely different from that which its framer designed. Not that the words have changed, but new combinations, new adjustments, new relationships have given them a new significance. The same process which has been going on in the business world in an analogous way affected all of life's relationships.

By reason of the new thought illuminating one old word, business combinations have been reconstructed and railroad managements reorganized. There is no institution so venerable, there is no profession so firmly grounded, that it has not been stirred to its foundations by this word. Industries that were supposed to have been conducted under most approved methods were found, when studied in the new light thrown on them, to have been directed with prodigal indifference to the least expenditure compatible with the largest possible returns. That word is "Efficiency."

In medicine it is compelling the substitution of exact knowledge for speculation. It insists that in the most important profession of all, because it is the one upon which all others are based, that of teaching, the standard of proficiency shall not be determined by the facts acquired but by the growing ability on the part of the student to meet the demands that

shall be made upon him; in his increased mental alertness, in his greater powers of concentration, of logical reasoning, of straight thinking, of his physical development, and of the added keenness of all of his senses. If in the acquisition of certain of these factors he is losing in others, then the method must be restudied and the unworkable factor eliminated. Measured by the standard of efficiency, the problem of education is almost exactly analogous to that with which our great business interests are confronted. The children constitute a vast asset. They are the equivalent of a certain amount of actual wealth, from which we have a right to expect the largest possible returns. They constitute the machine by which the world's work is to be done, and if the methods which we employ prove destructive to the machine which we are endeavoring to construct, there must be something fundamentally wrong with the methods. We thereby violate one of the first principles of efficiency long since enunciated, "that no great thing is ever accomplished by great effort." When a great thing is done it is done easily.

When the wheels begin to grind, it not only means that the machine is being destroyed but that power is being lost and progress is being impeded. When, therefore, we find that in the process of educating the child his nerves give way, his eyes are used with difficulty, or his sight becomes impaired, it is in itself evidence that there is internal friction and that the highest intellectual results are not being conserved. The excessive use of books and of note-taking, which by reason of the added visual effort required for near work is the chief cause of eye-strain and of the structural changes in the eyeball, is at the same time an obstacle to direct and logical thinking. The printed word is but a symbol of the thing or action which it represents, and it must be interpreted in terms of sense images. The groups of letters constituting the word in and of themselves are meaningless until they are so interpreted. So definitely are the seeing of the word and its interpretation dual processes that when a break occurs in the line of transmission in the brain connecting these two centers their sense of relationship is lost and the printed page carries no meaning to the otherwise intelligent brain. The *action* which the word or group of words represents is immediately understood. This condition is called "aphasia," or word-blindness. Its importance in pedagogy seems to have been overlooked. It means, if it means anything, that two efforts are required to convey an idea from the printed page when but one would have been sufficient had the act itself been portrayed rather than the symbols used to represent the act. The human mind is incapable of performing two functions at the same time. While the attention is given to the written or printed word it is diverted from the thought which it is intended to convey. Hence every hour of book-study means twice the time and twice the effort that would have been needed had direct methods been employed. Apply this to the whole long, costly period of tutelage and we can realize

how school life might be shortened and eyes and nerves might be saved by teaching the thing sought for itself without the intervention of the impeding symbols.

A student grew most expert in taking the lectures as given by his professor at college, but with added facility of transmission was proportionately lessened retention. The mental damage was incalculable. He was making a sieve of his brain, and the hour that he might have spent in mental athletics, in grasping the thought and in following the argument which was addressed to his intelligence thru his ears, was lost, and another hour was laboriously occupied late in the night in straining his eyes, in developing myopia, mental as well as physical, in interpreting, thru visual images, ideas that should have been made clear thru his auditory impressions.

It is the act of thinking that is the essential thing. We do not *see* with our eyes nor do we *hear* with our ears except as the brain understandingly recognizes the impressions made upon it. We use our eyes so constantly that we fail to hear much that should impress us. When immersed in thought or when deeply interested in a book or a newspaper we often fail to hear our names when called. It is not that the ears are out of function, but the mind is not alert and the message is not conveyed to the receptive center. A condition quite analogous occurs when we see without intelligently noting what passes before our eyes.

The habit of doing anything that should require thought without thinking of it is always mentally demoralizing. The penalty sometimes exacted of requiring children to write the same word a large number of times when it has been misspelled, or as a punishment for a misdemeanor, is pernicious, not only in giving added work to the eyes, but psychologically it is deplorable in permitting the mind to act automatically.

Professor Münsterberg recently asked the members of his class in psychology to watch every movement which he was going to make. As he drew geometrical figures in the air with one hand, he took his watch from his pocket with the other, glancing at it meanwhile; but so fixed was the attention of the boys on the unusual motions that the common, habitual, automatic one passed quite unobserved. "Eyes have we, but we see not."

Brain-building comes from thinking, and printed books are only the guideposts, not the steps, from point to point.

Lewis Carll was born blind. He worked his way thru college by the aid of his brains, and subsequently gained a life professorship in Columbia University by the unprecedented, the phenomenal, *tour de force* of an original work on *Differential Calculus*. Mr. Carll, tho able, is not an astoundingly brilliant man. He visualized his impressions and he followed each process in this intricate mathematical labyrinth thru the chambers of his brain. He mentally saw the picture of each problem at pleasure. This is what every noted chess-player does, especially those who play many games at once.

Just as the pictures received in the brain may be held to be recalled at will, so they may be received with the rapidity of photography.

Catharine Aiken, a very brilliant teacher, had some years ago a school in New England. She taught her girls what is called "glance work" and which is now in some form employed in many schools. Several disassociated letters or figures were placed upon the blackboard and the pupils were allowed to look at them for three seconds, when the board was turned and the girls reproduced what they had seen. The next day these symbols were increased in number or in complexity, and each day following they were added to, until finally a line of twenty letters, complicated by various distinguishing signs, was reproduced after a brief glance at them:

1 P C B X 2 0 9 D M 4 R Q 8 L O P T E S

An equally complicated and rapid grasp of visible symbols occurs when any good pianist reads, as she must, the coming phrase, in both clefs, with its modulations, its incidentals, its pedal markings, and perhaps the voice part, if she sings—and all during the brief time in which the previous phrase is being given. All of this is simply to urge that our present laborious method of using printed books to the extent that we do might be simplified, might be replaced by brain-training, giving us thereby a larger intellectual output at a lower cost of effort and without destroying the machine in the process. That these ideas are neither fanciful nor chimerical is instanced in the fact that many of our best teachers and wisest thinkers have applied them practically with such effect that otherwise normal boys and girls are looked upon as prodigies. In doing this we avoid internal resistence and we prevent structural damage as a consequence. Just as the Tungsten filament lasts longer and gives far more light than the carbon because it allows the passage of the current without resistance, so the more easily an idea can be transmitted to the brain the less injury to the paths of transmission. In our present methods the energy that should be directly used in thought is used in an effort to see, and as a consequence the eyes suffer. So recently as at the International Congress at Paris, 1910, the late Professor Dufour, than whom there was no more careful observer, corroborated the rules laid down by Cohn more than twenty years ago, viz.;

1. In all schools the number of short-sighted pupils increases from class to class.
2. The average degree of short-sightedness increases from class to class.
3. The number of short-sighted pupils increases with the increase of school demands.

Does it not seem imperative that such a destructive method, at least when the danger is imminent, should be replaced by one in which the same results mentally can be more quickly secured without injuring valuable eyes?

If we may not change the methods under which our children are taught, may we not at least secure for them hygienic conditions under which their studies may be prosecuted?

As the result of a questionnaire sent generally thruout the country inquiring as to the care of the children's eyes and the hygiene of the schoolroom, certain conclusions of great value were elicited. It was shown that there were no accepted standards governing the construction of school buildings, no general regulations as to the length of time which the adolescent eye should devote to close work, no consensus of opinion as to the tint, surface, or quality of paper to be employed. As a supplemental report, I would like to submit the conclusions reached by the Committee on the Standardization of Schoolbooks of the American School Hygiene Association at a meeting held in New York, of which William H. Burnham, Ph.D., was chairman, as the report on this subject of this committee—Dr. Burnham, professor of psychology of Clark University, being also a member of the committee of this Association. Many causes that are instrumental in producing defective sight are now known to be largely controllable. In order that thought may be fixed upon this subject and the public enlightened as to the necessity of wider knowledge concerning the care of the eyes, it is proposed that a certain day be chosen in the fall of 1912 as a Conservation of Vision Day, when the care of the eyes will form the subject for consideration in the schools and public assemblies thruout the United States. This has already been taken under advisement by the Council on Education of the American Medical Association, and they will be prepared to confer with a like committee which is to be appointed by this Association on matters concerning the public health. The children will be invited to consider the conditions under which eye-work is carried on in their own schools and in their homes. Addresses will be given by sanitarians, teachers, illuminating engineers, and others. The local lighting conditions of public buildings will be studied. The American Association on Conservation of Vision, which has received the moral and financial support of the Russell Sage Foundation, will act as a clearing-house, and the executive secretary, whose office is in the United Charities Building, 105 East 22d Street, New York City, will aid in the formulation of plans in sending suggestive and helpful literature in development of this method of educating the public on this important subject —the right care of the eyes and the hygiene of vision.

SCHOOL ACTIVITIES IN RELATION TO CHILDREN'S EYES

J. A. SHAWAN, SUPERINTENDENT OF SCHOOLS, COLUMBUS, OHIO

In these days of educational progress when school conditions are being so thoroly studied and work is planned according to the ability and adaptation of the individual child, it is but natural that the question of sense limitations, especially that of vision, should be taken into account in matters of school activities. The study of the causes of retardation which is now in progress has already shown that a larger percentage of pupils are handi-

capped in this respect than had ever been suspected. Thru these discoveries, many fields for special investigation have been opened.

At the Boston meeting of the Department of Special Education one year ago, a committee was appointed to study and report on the "conservation of vision." This committee consists of an opthalmologist, a psychologist, an illuminating engineer, a publisher, and a superintendent of schools. Its object is to study not only school conditions with reference to the use and abuse of vision, but other conditions, and to submit the results of its study, together with such recommendations and suggestions as may help to protect the eyes of children from abuse and to conserve and develop limited vision by proper eye-training; in other words, to suggest standards of light and the proper use of the eyes. The committee has so far planned to investigate the following phases of the subject:

1. The physiology and pathology of vision.
2. Illumination, both natural and artificial.
3. Objects of vision, including books, writing tablets, blackboards, etc.
4. The psychology of vision, especially with reference to conduct.
5. The legal aspects of the problem of the conservation of vision with special reference to legislative regulations.

This paper is intended as a partial report of one member of the committee and is confined to one phase of the subject.

In considering "School Activities in Relation to Children's Eyes," it is necessary to take into account the condition under which those activities are performed. Among these are the following:

1. The amount of light admitted to the schoolroom and the direction from which it comes.
2. The effect of a shiny or glaring surface, whether it be the blackboard or printed page, and the possibility of getting rid of it.
3. The size and clearness of type used and the tint and surface of the paper.
4. The amount of use to which the eyes are put and its possible reduction so as to prevent eye strain which is so common.
5. The correction of difference in refraction between the two eyes in so far as the school authorities can act or suggest.
6. The conservation of limited vision by proper eye-training.

Thru the courtesy of the Bureau of Education, a study has been made of the legal aspects of the problem based upon state laws and upon the rulings of state departments where the law, in many cases, places the responsibility of deciding as to the amount of light admitted into the schoolroom and the direction from which it should come. In this regard, very material progress has been made in this country within the past few years; but standards used by different states still vary:

1. *As to amount of light admitted.*—The ratio of the window surface to the floor surface runs from one-seventh or $14\frac{2}{7}$ per cent in Louisiana to one-fourth or 25 per cent in Pennsylvania and Virginia. Of 16 states reporting on the ratio between the window and the floor space, 1 requires one-seventh; 4 require one-sixth; 9 require one-fifth; 2 require one-fourth. A few would allow a lower ratio of light area if strengthened by reflecting lenses.

2. *As to direction from which light could come.*—In placing the windows—5 states allow them on the left and rear; 9 emphasize the left but allow supplemental light from the rear, preferably high half-windows; Indiana admits from the left side only where pupils are seated for study; when possible, Illinois would have light from the north side only. It is stated in many of the rulings reported that light should never be admitted from the front of the children. Even one window is very injurious. Reasoning from this statement, windows should not be placed in the rear. The eyes of both teacher and pupils should be protected. With windows in the rear, the teacher is either compelled to face a bright light or to change his position to the side or rear of the room. The best position for instruction, government, or influence is at the front, and the schoolroom should be planned with this end in view. It follows, and is rapidly becoming universal in school architecture, that light should be admitted from the left only and from as near the ceiling as possible. This would lead to the grouping of all windows on the left. They should not extend farther front than the first row of seats and the standard schoolroom should not exceed twenty-five feet in width, which would prevent the crossing of shadows.

There is a difference of opinion as to the color of window shades—green, blue, gray, slate, or buff, each having its advocate. The general opinion, however, is that the color of shades should depend upon the tint of the walls. The writer finds a Holland green or a light buff the most restful to the eye. The opinion is general that each window should be provided with two shades so that the upper or lower half may be covered or exposed at pleasure.

A glaring light always produces eye strain. To face a bright light or to allow the direct rays of sunlight to fall upon the page from which one is reading or a bright surface upon which one is working are exceedingly harmful and can so easily be avoided. From this point of view, the moving-picture show and other similar forms of exhibition, calling for sudden changes in the size of the pupil, are sources of great strain to the eye muscles and their value may well be questioned. The direct rays of the sun should never fall on the pupil's desk. A light buff-colored curtain should temper its glare.

The size, clearness, and simplicity of type are very important. The lack of clearness of outline which comes from overuse of plates is a condition for which there should be a remedy. This is particularly true of popular novels and many library sets which are run off edition after edition without change of plates, and the eyes of our young people are often ruined thereby. This price for old plates is entirely too great. There should be a limit to their use.

In the manufacture of textbooks, great progress has been made, due to wholesome competition. But even here, further improvement is possible by doing away with the glazed page and using a clear, soft, white page instead. We are aware that this is a problem, but it is the solution of problems that marks progress. We are glad to note that schoolbook publishers are showing a willingness to co-operate in this matter. In a recent adoption of schoolbooks for use in a large city, the kind of paper and the number of copies to be run off without change of plates were stipulated.

It has been truly said that the eye is a willing servant. It responds to

the call for service long after it has passed the point of fatigue, but in doing so makes heavy drains on the nervous system, often with serious after-results. Headache, nervousness, and sleeplessness are only a few of the bodily ailments that come from eye strain. This phase of the subject requires the most careful investigation and study by those who are responsible for the education of the young. What do statistics gathered from a study of children's eyes show? What school work should be required to be done by pupils by daylight alone? What work may safely be continued by artificial light? What amount of home work may safely be required of pupils of the respective grades? How much may be done by calling into greater activity the other senses? How much of the instruction of the schools should be oral? What limitations can be put upon written work and the conditions under which it is done? These and other questions must confront those engaged in school administration.

Your committee has begun an extensive investigation of conditions in this country and abroad, gathering opinions from experts and non-experts, believing that the unbiased good-sense of the non-expert will have great weight in the solution of the problem and in the fixing of standards.

A comprehensive questionnaire has been prepared and three thousand copies sent to superintendents and principals of schools in the United States. Answers are coming in from all directions and these are being tabulated for comparison and study. It will be possible in this paper to call attention to those facts only which have a bearing on school activities.

Out of 736 answers it is found that 456 or 59 per cent have the eyes of children examined periodically.

It is interesting to know by whom these examinations have been made. Out of 504 answers, the following facts are deduced:

326, or 42 per cent, of the examinations were made by teachers.

138, or 17.7 per cent, of the examinations were made by physicians.

30, or 3.9 per cent, of the examinations were made by teachers, physicians, and opthalmologists.

10, or 1.5 per cent, of the examinations were made by opthalmologists and specialists.

The following question, which has a direct bearing on the subject in hand, is very interesting and the answers are frank and to the point.

"Have you ever made any investigations of the effect of different kinds of paper, type, printing, or other qualities of textbooks on the eyes of pupils?" Out of 628 answers, 492 or 63 per cent stated frankly that they had not. But a great many of these expressed their opinions as to color of paper, kind and size of type which they thought best for the children's eyes. Dull-yellow, unglazed paper, and large, clear, black type was the predominating idea. The conclusions of the 138 or 17.7 per cent who had investigated the matter, were practically the same as to color, type, etc., as those reached by the non-investigators.

To the question, "Have you ever observed any effect upon the dis-

position or moral conduct of any pupils which could be definitely traced to eye strain?" 684 or 85.9 per cent had noticed that the eye strain had caused nervousness, irritability, uncontrollable temper, and backwardness in their lessons, and as soon as glasses were worn these children made great advances in their studies, and became tractable.

No doubt many a happy disposition has been spoiled because of conditions of children's eyes of which parents and teachers have had no knowledge. Such a state of affairs is not only unfortunate but it is in a sense unpardonable. It is the object of this committee and of the American Association for the Conservation of Vision to gather and to distribute such information as will keep parents and teachers informed on matters of this kind, which touch so closely the welfare of the children.

1. That the number of hours approximately of required eye work (including reading, writing, etc.) of pupils of the following ages while in school varies from one to five, with children under 12 years old, the larger percentage having four hours; from one to seven hours for those between twelve and sixteen years old, the largest percentage having five hours; and from one to nine hours for those between sixteen and twenty years old, the largest percentage having five hours.

2. That the amount of time given to study outside of school by children of the following ages is, in most cases, quite insignificant and is given in detail:

Under 12 years, 56, or 10.8 per cent. worked ½ hour
Under 12 years, 98, or 15 per cent, worked 1 hour
Under 12 years, 14, or 2.6 per cent, worked 2 hours
Under 12 years, 8, or 1.5 per cent, worked 3 hours
Under 12 years, 340, or 65 per cent, worked little or none
From 12 to 16 years, 64, or 13.6 per cent, worked ½ hour
From 12 to 16 years, 8, or 1.7 per cent, worked ¾ hour
From 12 to 16 years, 260, or 55 per cent, worked 1 hour
From 12 to 16 years, 96, or 20.4 per cent, worked 2 hours
From 12 to 16 years, 8, or 1.7 per cent, worked 3 hours
From 12 to 16 years, 34, or 7 per cent, worked little or none
From 16 to 20 years, 8, or 2.5 per cent, worked ½ hour
From 16 to 20 years, 4, or 1.2 per cent, worked ¾ hour
From 16 to 20 years, 158, or 49.2 per cent, worked 1 hour
From 16 to 20 years, 54, or 17 per cent, worked 2 hours
From 16 to 20 years, 58, or 18 per cent, worked 3 hours
From 16 to 20 years, 18, or 5.6 per cent, worked 4 hours

3. That the amount of miscellaneous reading required outside of school is not large except in a very few cases:

Under 12 years, 50, or 21 per cent, worked ½ hour
Under 12 years, 40, or 17 per cent, worked 1 hour
Under 12 years, 56, or 25 per cent, worked 2 hours
Under 12 years, 140, or 59.2 per cent, little or none
One school reads five books a year
Three schools read four books a year
Two schools read one book a year

None of the above is really excessive for children with normal eyesight and it is far better that books selected or suggested by the teacher or thoughtful parent should be read than that the child should be left unguided. The quality of the paper, the size of type, clearness of print, and the contents, are more likely to be considered with care.

While statistics do not furnish a final answer to all questions, they do help in their solution. If they lead to an investigation of existing conditions, they accomplish much.

The innocent often suffer in silence because they know no better. It is the duty of those who have to deal with children to find defects where they exist and correct them. In the *Government Reports* of Australia it is said:

> The child finds it difficult to express in words what he is suffering from. He says he has a headache after school, but does not talk of eye strain. He is noticed to be "delicate" and pale, but pulmonary tuberculosis is not thought of. He is named as dull and mentally backward in class, but deafness or other defect is not indicated.

As Ruskin says:

> When violent and external sources of suffering have been done away with, worse evils seem arising, evils that vex less and mortify more; that suck the blood, but not do shed it.

A child may be half blind, yet make no complaint of the fact. Indeed, such defects are, as a rule, unsuspected, and only found by applying some definite tests. The placing of such a child in a suitable position near the blackboard, and, if possible, securing his attendance at an oculist's and fitting of glasses for reading, etc., will often make all the difference between an unsatisfactory, dull, lazy, miserable, "headache" sort of a child, and a bright, alert, happy pupil.

Dr. Wheatley, an eminent English physician, in enumerating the chief causes of defective vision as far as school life is concerned, says:

> If eyesight were considered of paramount importance, no children would be admitted to school under seven years of age. The utmost care should be observed in not allowing near work except for short periods.

While we may not agree with this eminent authority in the first part of his statement—for many children in this country, if they get any education at all, must get it early—yet the second part of his statement is absolutely sound. Many schools of this country do watch the length of periods for near eye work and make them short and to the point. The problem is to get the importance of the question before all schools.

The so-called Cohn's rules, corroborated by Dufour at the International Congress, Paris, 1910, have been substantially established wherever the investigations have been made. They are as follows:

1. In all schools the number of short-sighted pupils increase from class to class.
2. The average degree of short-sightedness increases from class to class.
3. The number of short-sighted pupils increases with the increase of school demands.

This is not a new discovery, but seems to be a stubborn fact. In my own city of Columbus, twenty-four years ago a careful examination of the eyes of four thousand seven hundred children by a specialist showed

the diminution in the percentage of good eyes as we ascend the scale from 80 per cent, in the D primary grade (first year), to 66.6 per cent in the senior class in the high school.

Partial examinations in recent years, also by specialists, are substantially the same. We must, therefore, recognize the facts tho we may not agree fully as to the causes. It is but fair to say that school duties alone do not account for the growing defects in vision noticed as children pass from grade to grade. For, as they advance in their classes, they also advance in years with constant demands for the use of their eyes outside of school. The reading of cheap literature on poorly printed and glossy paper, close needlework and the like, late hours, and, in these days, the glaring, flickering, moving-picture shows all figure in the many causes outside of educational work.

It is not so much a question, however, of locating responsibility, as that of understanding conditions and meeting them in the most intelligent manner. School officials and boards of education as a rule stand ready and anxious to use the best methods under the most favorable conditions.

How can the amount of work be reduced? is a question that many will ask. This is not always necessary. It is the method used rather than the amount done that needs to be considered. The old way of teaching "mental" or oral arithmetic had its value in mental training. Are we not demanding too much pencil and pen work? Would not our pupils learn to think better if less were written and the mind trained to carry certain processes of thought to a final conclusion? Is not the power to think, after all, the highest end in education? Is it not, in other words, possible to accomplish as much and more by allowing the children to think more and to talk more, thus sparing the eye but increasing the power of thought and expression?

The correction of defects in vision can only be brought about by the sympathetic co-operation of parent and teacher in securing proper treatment when needed. Many parents object to tampering with the eyes while others hold back on account of expense. The objections must be overcome by proper information supplied the home thru school. Where necessary on account of poverty, treatment should be free. In most cities, such provision is made thru some special organization, or fund. It is not necessary to enlarge upon this phase of the subject, for its importance, we think, is generally conceded. Attention has already been called to the effect upon the disposition, attitude, and happiness of certain children, by supplying proper glasses.

It is a physical law that every power is strengthened by exercise. A muscle properly used becomes strong and healthy, while overuse or strain breaks down tissue and destroys power. This law applies with equal force to the senses. By training, the eye of the sailor detects objects in the distance long before the ordinary person is able to see them, no matter how good his natural vision may be. The Indian places his ear to the ground and hears sounds that his civilized brother cannot hear. So in music and in art, the senses have been trained to bring messages to the brain which the

latter has also been trained to interpret and appreciate. The *tactus eruditus* of the physician is but the result of sense training. It follows that, if a perfect sense is capable of training to such a degree, a sense with limited power is capable of training to some degree. Who knows how much? Certain it is that all that can be done should be done systematically and intelligently. This topic might easily be a subject in itself and cannot be enlarged upon here. If by proper examination those who have defective vision could be designated and given such an amount of work as would not strain the eye, but train, develop, and conserve its power, great good would be accomplished. It would be better still to segregate and train together those with defective eyesight when the number is sufficient to justify such a course. But in any system, by counting units of work instead of subjects, by omitting certain studies most trying to the eye, strain could be avoided, vision conserved, and the earning capacity of many greatly increased.

To summarize in conclusion:

First, light should be admitted to the schoolroom from the left of the pupils with a window surface equal to not less than one-fifth of the floor surface.

Second, a shiny surface whether the blackboard or printed page is injurious and should be avoided.

Third, the type used for printing schoolbooks should be large and clear.

Fourth, the amount of work requiring pencil or pen should be limited.

Fifth, correction of the difference in refractive power of the two eyes should be discovered and promptly made by the use of proper glasses.

Sixth, where the power of vision is limited it should be conserved and developed by proper eye-training, either by segregation or by the omission of certain subjects of study.

LEGAL PROVISIONS FOR EXCEPTIONAL CHILDREN

MAXIMILIAN P. E. GROSZMANN, EDUCATIONAL DIRECTOR OF THE NATIONAL ASSOCIATION FOR THE STUDY AND EDUCATION OF EXCEPTIONAL CHILDREN, PLAINFIELD, N.J.

At the Boston meeting, the Department of Special Education passed a set of resolutions recommending the amendment, development, and extension of the existing compulsory-education laws of states and communities so as to cover the problem of the exceptional child. The principles set forth in these resolutions were to be elucidated further at the next year's meeting. This paper is intended to carry out this recommendation.

The first of these resolutions demanded that compulsory-education laws should embrace *all* children of school age, and provide for their training.

There are still seven southern states in which education is merely optional with the parents or guardians of children of school age. The other southern states have recently adopted laws similar in purport to those which have obtained in the North for many years past. There are, then, compulsory-education laws in forty-two states.

There are a few interesting facts to be noted in connection with these conditions:

1. In the South, it is the prevailing custom to segregate the colored school population in separate schools, in some cases even going so far as to make it a misdemeanor for children of one color to attend a school established for children of another color. This segregation is not decreed for pedagogical reasons, and because the educational problem of the colored child is considered different from that of the white (as it certainly is); but merely from what has been called "race-prejudice." In some compulsory-education states, like California, provision is made, for similar reasons, to have separate schools for children of Indian or Mongolian descent.

These arrangements are a long way off the appreciation of the differences in the educational problem which a closer scrutiny of child and race psychology may reveal.

2. The non-compulsory states *do not exclude any class* of children from the public schools which are open for all children of a certain age. The natural conclusion is therefore that these states cannot discriminate against defective, difficult, or feeble-minded children. Yet the provisions for these classes of children do not seem to be adequate, nor is their problem stated distinctly. In all states, however, where a compulsory-education law has existed for some time, it is definitely stated that *children whose physical or mental condition is such as to make their attendance at school inadvisable may be excused.* In some states, medical examination is provided for such cases. This clause refers not only to children suffering from temporary or infectious disease; but likewise to the deaf and dumb, the blind, the epileptic, the crippled, the otherwise disabled, and also to children of defective or difficult mental development, including the feeble-minded. In a number of states (and communities) there are also special provisions empowering school boards to exclude from school those children whose continued misconduct makes their further stay in the schoolroom undesirable.

The question now arises, What provisions are in existence to meet the cases of children for whom the public day school is closed?

This question is not easily answered, as there is no complete compilation of all the school laws and provisions existing in the different states and communities. Even the publications of the United States Bureau of Education do not contain complete information, or readily accessible material, and inquiries have only shown how much need there is for a comprehensive tabulation of all existing laws, provisions, institutions, etc. I have culled some interesting data from the material at hand, altho it is not impossible that some of my details may be incomplete or even inaccurate.

One conspicuous defect may be mentioned first. There are states where children whose parents are too poor to send them to school decently clothed, are exempt from attendance. Nowhere is mentioned what is to become of this miserable class of children, unless it were that they will sooner or later be picked up by truant or police officers as "vagrant,

neglected, and dependent," perhaps even "criminal" children. There seems to exist no legal provision for caring for these unfortunates until they come under the control of penal law, that is to say, after they have drifted onto the refuse heap of society.

While the poverty plea for the exemption from school attendance is incorporated in the laws of such states as Minnesota and Montana, North Carolina has a law to allow clothing to indigent deaf and blind children attending school. Clothing is provided in many state institutions for blind, deaf, and feeble-minded children. But for normal children from poor homes it is not provided, until they are picked up as transgressors from the street.

Here as in a number of other things pertaining to children, too much is yet left to the initiative and charity of private individuals and organizations.

Naturally, provisions are plentiful when it comes to the *delinquent* child —the child whose chances for right living have already been prejudiced by the neglect of those responsible for his bringing up, be they his parents or guardians, or the government of organized society. Penal institutions for the young, whether they are called reformatories, industrial schools, or state homes, or what not, have existed in all states for many years, and the method of committing children or youths to them is everywhere very much the same. It is largely a function of courts and police, altho in some instances the school authorities have the first word in the matter. This is especially the case where there are truant officers appointed by the school boards, and where there are truant schools which are often called parental schools.

With the exception of these parental schools, there is too much of prison régime and too little of truly educative training in those reformatories and industrial schools to which the youthful criminal and what has been called the "incorrigible child" are committed. With some notable exceptions, even the industrial training which the offenders receive is hardly educative in character. Correction is, nominally, one of the aims of commitment; but the organization of these institutions is too plainly prisonlike to make correction an educational element. This judgment does not fit all, but most of these places, and it is notable that few have educators as heads or superintendents and that they rarely form an articulated part of the educational system of the state or community which maintains them.

The establishment of children's or juvenile courts, with special judges to preside over them, and medical officers connected with them, and also the system of probation, have done much toward developing a better understanding of youthful offenders and of the causes of their delinquency. The main portion of the work, however, has been done by private charitable societies, with their visiting nurses, friendly visitors, and field workers of different kinds. Even the probation system is still too loosely connected with the school system, and the methods of dealing with child delinquents

are still so unscientific that much further research and organization are necessary to make a solution of the problem possible.

Truant schools are the nearest approach to a rational treatment of the habitually vagrant and idle child, as they recognize the educational character of the problem most readily. Even here, it is only a matter of recent progress that the state of truancy is appreciated as a developmental symptom in many cases.

"Incorrigible," delinquent, or truant children are not yet recognized as suffering from defective potentials, physical or mental. But even for those who are commonly understood to be defective, no clear system is generally followed in states and communities. To quote from a letter received from the Bureau of Education:

> A number of the states provide for the compulsory education of the deaf and the blind, but such provisions are not usually incorporated in the general compulsory laws.
>
> It is not customary for the states to require local school corporations to provide special schools for their deaf and blind, since the care of those unfortunates is generally considered a state duty. Certain states, however, specifically authorize the districts to maintain such schools, and some do so.
>
> State provision for the feeble-minded is not universal, but provision is made for such children, more or less effectively, in perhaps the majority of the states. I am not able to make general statements with confidence concerning the laws for the care of the mentally deficient, however, for such laws are often classified with those relating to charities or the insane, and I am not by any means sure that our information upon that subject is complete. It is not customary to establish state institutions for merely dull or backward children, nor are they excepted from the compulsory-attendance laws. So far as I know there is nothing to prevent any school board from segregating such children in special classes.
>
> Concerning children of sound mind but with crippled or deformed bodies, the laws are silent in most of the states. In Illinois, boards of school directors may establish schools or classes for them and in Wisconsin they may be sent to the state public school for neglected or dependent children.
>
> Such schools are without legal obligation, and the most that any state does is to authorize them. It may be assumed that the constitution and laws of every state require that provision be made for the education of all children of stated ages, and nowhere do we find that children with crooked legs are excepted. Those children are not compelled to attend school, but if they wish to do so and if the proper authorities see fit to provide for them, there is no legal reason to the contrary and permissive laws are superfluous.

This is certainly true, and yet we see that legislation for a suitable education of all children of school age is still imperfect and obscure, and that for a great percentage of handicapped children—those that are in need of educational facilities—there are no laws compelling their attendance at school, but they are left to the tender mercies of ignorant and often criminal parents or guardians. And even if there were compulsory laws, the provisions for these unfortunates are utterly inadequate. It still requires much persuasion to convince legislative bodies that appropriations for handicapped children are necessary; that it is false economy to save on the educational end and then to spend many times as much for meeting the

situation caused by the presence of defective, ignorant, and vicious elements in society.

The next two paragraphs of the Boston resolutions scrutinize the age limitations themselves. They demand that a distinction should be made between the age of a child, or person, in years, and what we may call the "mental" age. While it may be difficult to determine normal standards with absoluteness, we may assume that for every life year of a normal child there is a corresponding normal maturity. This normal maturity can be approximately ascertained by appropriate tests made on a large scale, somewhat as the well-known Binet tests have been developed. It is now demanded that compulsory laws be so amended that they determine the age limit by way of maturity tests; in other words, that they compe, attendance not for children between the ages of six and fourteen, for examplel but for children who are developmentally the equals of normal children of six to fourteen. There are children who, at the age of six, are not farther advanced than a normal child of two, and others who at fourteen have only reached the maturity of a child of five. It will be noticed that even when there is, in the compulsory laws, a certain elasticity of legal age, no matter whether a child can read or write at the extreme age limit or not, he is beyond the letter of the law. But even reading and writing are deceptive evidences of a child's maturity. There are many who have accomplished these arts and yet are helplessly abnormal; and others who, altho illiterate, are mentally more than mature. For these tests will further reveal that there is a percentage of children who are mature beyond their chronological age, owing to a more rapid rate of development.

It is this fact which induced Miss Elizabeth E. Farrell, a member of the committee which drafted the Boston resolutions, to suggest a modification. She fears that it would be prejudicial to the efforts of the National Child-Labor Committee to protect children of tender age from the moloch of industrialism whose tendency has been to fill factories, mines, and shops with immature children. A child mentally premature would thus be delivered over into the unprotected class.

The Boston resolutions, however, guard distinctly against such a possibility. "Mental maturity" is really not mentioned. They speak merely of *maturity* and demand that "a child's actual age be determined by physio-psychological data corresponding to the normal standard for the age limit required by law." It is clearly seen that physiological, that is to say, body maturity is required as well as mental maturity. There is a small number of children who are precocious both physically and mentally. They would certainly not be harmed even if under the new conception the child-labor laws should fail to protect them. But it would be relatively easy to guard against possible difficulty in this respect.

Some kind of tests and examinations have been used wherever school systems made an attempt to handle certain classes of exceptional children

intelligently. But my own state of New Jersey has gone on record in her recent epoch-making legislative activity to be the first to make maturity tests obligatory in all schools of the state. Senate bill 265 provides that each board of education shall ascertain which children, if any, there are in the public schools who are three years or more below the normal, and that special classes be established for them; likewise it provides for special classes for blind or deaf children, and for medical examination of the pupils in the special classes at least once in every three months.

This last requirement is of special interest since mere intelligence tests, like the Binet tests, would give only a one-sided and incomplete scale of maturity. A complete system which would determine the actual stage of a child's development must include medical examinations, body measurements, neurological tests, physiological and pyschological data, together with examinations of sensory acuteness, so as to present a complete diagnosis of the individual case. It may be impossible to make such a complete analysis of every child, and it may be equally unnecessary; but in the more doubtful and difficult cases nothing short of complete data will suffice. Even ordinary promotion should in a measure depend upon bodily fitness.

The last paragraph of the Boston resolutions demands that all children or persons failing to meet a maturity test shall be permanently under public supervision and control.

This is the most important suggestion of all. For it gives to organized society the function of control of all persons who are incapable of taking care of themselves, or of competing with others for an independent place in life, or who might become a menace to society at some time in their career. This function means prevention instead of uncertain cure, or of eventual pauperism or imprisonment. It means forestalling evil tendencies instead of first letting them run wild and of later running after the evil-doer. It means beginning at the right end of the line instead of at the wrong; saving money and social unrest and turmoil. In this manner, society would take the only possible positive step toward eradicating evil, by gradually making it impossible for immature and dangerous individuals to propagate their kind.

A few brief reflections may be added to elucidate the full significance of such legislation.

There is evidence that about 3 per cent of the entire school population of the union are permanently incapacitated to compete with normal individuals for an honest and independent career. They require institutional care. The figures of the Bureau of Education show that there are over twenty-four millions of children between the ages of five and eighteen in this country. That would mean that over seven hundred thousand may be found to be abnormal. Even taking only the actual enrollment in public schools as a basis (seventeen and a half millions in 1909) we have over five hundred thousand abnormal children.[1] Note that this number

[1] The term is used in the sense of the author's tentative classification of exceptional children.

does not count in the many adults needing similar care. Investigations instituted by the Church of Help, in New York, in reference to the causes which lead women into a life of prostitution, make it probable that at least one-half of these women are distinctly feeble-minded. Here you have the problem of prostitution looming up before you.

Further, in the reform schools, you are apt to find among the inmates quite a percentage of weak-minded persons. A recent examination of one hundred inmates of the Rahway Reformatory (New Jersey) throws an interesting light upon this condition. Testing them with the Binet scale, it was found that 41 per cent were decidedly subnormal or even directly abnormal. One boy of nineteen proved himself mentally the equal of a child of five years. But as the Binet scale does not go higher than thirteen years, and the natural age of inmates admitted to the reformatory is fixed by law at sixteen to twenty-five years, it is evident that a more thoro test would reveal much more startling figures.

The statistics of the Bureau of Education show, on the other hand, that less than eighteen thousand feeble-minded persons are in public or private institutions, or less than 4 per cent of the entire abnormal school population. Certainly a most horrifying consideration! Even if the total were lower than has here been estimated, even if only one child in a hundred were feeble-minded or otherwise abnormal, the figures would be appalling.

Necessary as it is to fix attention upon the urgent need of dealing intelligently and effectively with the abnormal, I dislike to approach the problem of the exceptional child from this point of view. It tends to stigmatize all exceptional development as leaning toward degeneracy—which is certainly not true. There is a vastly larger percentage of handicapped children who are potentially, or even plainly, normal, yet whose difficulties are such that they are in danger of derailment. They represent a valuable asset which under present circumstances is too often lost. The science of saving waste material must be learned in dealing with human beings as well as it has been learned in industry and manufacture.

This large class of children comprises not only the blind and deaf, the epileptic, the crippled and deformed; but also those who suffer from minor defects of vision and hearing, those who are in delicate health, or neurotic and neurasthenic, or merely slow in their rate of development. In other words, all those children whom I have called atypical, subnormal, and even the pseudo-atypical. Brother Hutchinson wrote one of his latest magazine articles on the difficulties of the "delicate child"; and in another magazine of recent date, Algernon Tassin showed the relation of eye-strain to immorality. Those who have followed the trial of the Camorrists in Italy with any degree of attention must have been struck with the many instances of fainting spells, convulsions, and emotional outbreaks which were recorded during the proceedings. It seems plain

that the prisoners belong to a mentally and emotionally unstable class. Neurologists know that persons of epileptic and neurotic tendency have an inclination for exciting as well as underhanded activity; that they often live in an atmosphere of overstrain, excessive imagination, intrigue, trickery, slander, secrecy, and even violence. These facts may throw light also upon the problem of the Black Hand, of the underground world in general, and perhaps even upon the plots hatched out by mentally diseased members of otherwise legitimate organizations. A closer scrutiny of certain classes of children, those that I have called the submerged classes, and children of rudimentary and atavistic development, may disclose valuable facts which would help us in solving the problems of social unrest and social development.

Of these difficult children there is a very large percentage. To say that 25 per cent of the entire school population belong in this large group, is certainly conservative. Following the same method of calculation used in the previous figures, we may say that there are between four and six millions of them in this country. Will you undertake to deny the magnitude of their problem? Will you be ready to assert that the schools, and school legislation, have done all that can be done for them?

No further justification is needed for the adoption of the Boston resolutions. They have found favor with many thinking men and women who have been asked their opinion about them. Yet we may assume that the far-reaching wisdom of these resolutions will perhaps be but slowly grasped by the general public and by legislative bodies. They embody in terse form the demands growing out of a thoro understanding of the vast problem which the presence of the exceptional child in our modern civilization forces upon human society. This problem must be faced intelligently and resolutely, and nothing short of thorogoing measures will succeed in solving it definitely.

WHAT CONSTITUTES A SUBNORMAL CHILD, AND TO WHAT EXTENT CAN HE BE TRAINED?

VINNIE C. HICKS, SPECIAL PSYCHOLOGIST, PUBLIC SCHOOLS, OAKLAND, CAL.

You who are specialists in the study of atypical children need no review of their many definitions and classifications. Every psychiatrist, every psychologist interested in such children, has had his own individual opinion concerning the best basis for a description of them. Read de Sanctis, Tredgold, Barr, Calkins, de Croly, Ireland, Holt, Seguin—every one of them adds his quota to the sum total of our knowledge of the subnormal child. Some, like Shuttleworth, classify etiologically, under subgroups of arrested development and accident; some, like Bourneville, classify morphologically or anatomically; some, like Noyes, classify purely psy-

chologically; Binet describes by suggestibility; Beach divides into anomalies—congenital, appearing during early development, or acquired. All of these are good.

But we are members of an educational association rather than experts in psychiatry; and my topic includes not only the definition of the subnormal child, but the possible extent of his training. If, then, our interest in this subject lies so definitely along developmental lines, we should have a definition of subnormal children which will be a foundation for training. Such a working definition does not seem to appear in any practical form in the classifications just mentioned.

Nor can we depend upon separation of subnormal from normal children according to retardation in school. The twelve-year-old child in the first grade is usually subnormal. But foreign birth or long illness may place him in the badly retarded class without his being subnormal according to the standards of any of us.

Suppose we establish a norm from study of our ordinary children, apply this to our questionable ones, and call those subnormal who fall below. Then probably Sir Isaac Newton, Harriet Martineau—in fact, a goodly company of the world's great ones, would have been subnormals in their childhood. Such a result does not appeal to our common-sense.

This is not said to discredit the psycho-physical examination of the child, however, for it is our best method of arriving quickly at a judgment concerning his normality or subnormality. It is merely a warning against letting an hour's study of a case in clinic lead to an irrevocable decision on it. Moreover, the examination may sometimes be actually misleading. For instance, a Mongol idiot girl once passed in my office a better examination than many of the children of much higher type. A devoted mother had given her heart's blood to teaching her to read, write, figure, dance, play the piano, cook, embroider, etc. Yet the most casual observer could see that the future held nothing of independent effort for that girl.

And this very phrase, "independent effort," introduces naturally what I believe is a good working definition for the subnormal; viz., such a child as may with special training become self-supporting, but who, without that training, will probably be an economic dependent.

We expect our normal children to become producers, adults who earn enough for their own support and possibly for that of others. If the adult does not reach this standard, he is not a normal citizen. If he does not reach it because he cannot, he is below the normal.

As forerunner of the man of tomorrow, our child of today becomes of immense economic importance. If he develops into the producing class, all well and good. If he becomes a state charge, we producers bear the burden. But if he is in the possible class, depending on our wise teaching to keep him from dependence, we are economic fools to put him thru the common-school mills until he sinks into prison or asylum pauperism.

Granted that this economic side is the practical, working side of the subject, we may go more into the details of judging a child on the economic basis.

When the subnormal child comes to the clinic for examination, we may find his subnormality marked by some one much aggravated condition, or by several adverse characteristics which combine to work mischief. The latter is usually the case.

The most common and portentous characteristics are:

1. Bad physical conditions. These may be eyes out of order, causing nerve strain; clogging of breathing apparatus by adenoids and enlarged tonsils, with resulting deafness; a condition of malnutrition, congenital or environmental; bad habits of living, such as drinking stimulants, keeping late hours, no bathing, foul air at night, masturbation, smoking, etc.

2. We commonly find inability to cope with social necessities. This includes timidity with other children, lack of self-protective sense, fear of physical things like loud noises, descending stairs, a swiftly thrown ball. The child can't "make good" with other children in ordinary play relations, yet he may be able to run errands and to do some work at home and in school.

3. He very often shows a peculiar clogging of his mental processes when subjected to questioning or to any observation which arouses his fear or self-consciousness. The older he grows the more strongly he feels his inability to cope with his environment, and the worse the nerve-clogging which results from rousing his timidity. It is almost psycholeptic.

4. The subnormal child usually has poor muscular co-ordination, fatigues quickly, and has nerve signs. While able to read and write, he has hazy and limited visual and auditory images, gets comparatively little from what he reads, and can reproduce verbally even less. So common as to be almost a rule is lack of mathematical ability. The subnormal mind lacks the clear imagery, the power of persistent concentration which lead to ability in abstract thinking. If it were possible to have only one glimpse of a child and to ask him one question, I should invariably ask, "If you had 16 pennies and lost 4, how many would you have left?" varying the figures to suit the child's actual school experience with numbers.

5. The subnormal is both slow and poor about reacting to new conditions. His associational processes are not so well defined that they can lead cumulatively to a new concept. He uses the trial-and-error method, like an animal, and sometimes arrives at results contrary to common-sense.

6. With some subnormals there is a lack of moral sense, a real, practical inability to feel the moral necessities of life. Once in a while this is coupled with a disregard of even the common-sense limitations on conduct. The dark closet and long-honored rod seem utterly meaningless, not so much because the child wills to repeat the wrong, after the deliberate fashion of the ordinary child, but because he is unable to will *not* to. When the sensibility to moral judgments seems absolutely lacking, we must drop the child from the subnormal class into that of the true defective, or the morally imbecile.

Now all of these are characteristics which are likely to appear in the subnormal child under clinical examination. A normal child may show any of them to a certain extent, but not so plainly that they prohibit his progress in school, his development at home, or his ability to keep up with the average of his comrades in their relations. The idiot too may show these characteristics. In him they are so accentuated that he fails utterly

to keep pace with his mates in their games, their contests, their errands, and money-changing, their common-sense judgments of men and affairs. He has neither initiative nor inhibitions. He is a follower. The normal child opposes him with originality, energetic leadership. Between these two opposites lie the subnormals, having some inhibitions, some ability to form original judgments, and best of all, practical educability.

Given now certain stigmata of the subnormal, let us see what the future demands of him. The adult to be self-supporting must:

1. Be able to labor reasoningly.
2. Be able to reckon his wages and expenditures.

If the child under examination is too dulled by bad physical condition to work well; if he cannot hold his own with his fellows socially; if he doesn't understand their ethics; if he can't figure in terms of money and time: then he is subnormal and needs special training to become independent.

This limitation of the word "subnormal" indicates the trend of the necessary training. First and foremost, the child must be taught to work reasoningly. Most of the subnormals found in our public schools have learned to do some work. At home they wash dishes, clean floors, chop wood, feed animals, tend baby, or even make lace. In school they learn to read, write, and perform certain mathematical operations. Suppose they enter the special room at ten years, having had four years of school and coming from high first or low second grade. The probabilities are that they will have four years more of schooling. We meet the questions, Of what use up to date have been their home and school work to teach them to labor reasoningly? and, How can we supplement it in the four years remaining so that they will become self-supporting?

First, encourage the home work. It has practical value both for present development and future vocation. Many have made livings as dish washers, cleaners, nurse maids, stable hands. But the fact that the child does this practical work at home does not mean that he does it unsupervised. The training-room must stimulate independence. Not mere manual labor, but labor performed *reasoningly* is our aim. In every cooking-lesson, every problem in bench work, even in the study of the three R's, there must be the effort toward independent thinking. This does not mean that Jane crochets after a flighty jumble of ideas of her own, or that John idly hammers nails into wood for the sake of the noise and the action. The ideal of a definite, perfect bit of work is held before the child, and he is led to try for that ideal himself. The first work is necessarily simple. The subnormal child is always the discouraged child, the child so used to failure that the idea of doing anything well in school is a novelty. There is no better beginning for his training than by supplying him this novel feeling of success. Under the spell of its attractiveness, more complicated work will follow.

The vocational outlook must be kept in mind in all of his training. Half of his probable school time is already passed and without progress. The remaining half must be cleared of all educational frills and devoted without shame or concealment to such training as will make of him an honest, wage-earning citizen. The exact vocational lines to be followed must depend on the kinds of manual labor offered in the child's home town, on his own individual proclivities, and on the business and social status of his father.

For instance, in the training-room at the Lincoln School in Oakland is an eleven-year-old colored boy, the only living child of elderly parents. His father is a bootblack; his mother works out by the day. Neither one can read or write. The boy has a marked fondness for making things neat and orderly, and loves to help with all kinds of housework. He has been having cooking-lessons with the girls and we hope to make a good houseman out of him.

Good general training for the boys is bench work. It is almost invariably interesting, can be correlated with their mathematics, teaches them the use of tools, and leads to original thought. Its value is enhanced if articles can be made and sold so that the young workmen may gain an idea of the money value of materials and labor and of resulting profits. Its direct vocational value is not so great, for many subnormals will never be capable of doing independently the figuring incident to a carpenter's trade.

Brick-laying and stone-mason's work can be acquired by more. Plumbing is not beyond some, and a surprising number have a real facility for wiring electrical apparatus. Weaving is good for both sexes in the training-room. It necessitates concentration and forethought, leads to appreciation of æsthetic values as well as to general knowledge of textiles, and has the same possibility of sale as the bench products.

It will be noticed that none of the suggestions just made lead to factory work. Yet there are many, many kinds of factory work quite within the mental powers of the subnormal. One could count a dozen in as many minutes. Still the factory is not a desirable place for the subnormal to find employment. Help him physically and mentally as best we can, he is still a creature of unstable nerves, and the excitement of the factory, the noise of its whirring machinery, make for him a most undesirable environment.

The very best vocational training for our subnormal boys is that which takes them out of doors and teaches them the care of trees and animals, the cultivation of the soil. It makes for good health, freedom from bad habits, courage in facing life's demands. The ideal training school for subnormals will be a farm where the boys do everything from shingling the roof to currying horses and pruning trees, and the girls wash, cook, sweep, sew, crochet, make butter, and weave rugs, as their great-grandmothers did before them.

Along such vocational lines, most of those who go from the clinic to the special room, adjudged subnormal according to the economic definition given at the beginning of this paper, will be found educable. Only now and then will there be an erratic one, knowing one day, unknowing the next, in a fashion we could not predict from our clinical examination. He too will be educable but must always be supervised. His ultimate bourne must be an institution, along with the child who never learns our ethical inhibitions.

If we admit that the vocational training just described is possible for the subnormal child, and that under it he satisfies our demand for "reasoning labor," we must still require of him some number sense. He may be a good farmer and never read or write, but he must be able to count his income and his output, even if he has to do it on an abacus or on his fingers. He must be able to multiply his bushels of potatoes by their price per bushel, or the hours he works by his wages per hour.

This matter of mathematical calculation is the most difficult we have to deal with in the teaching of our subnormals. Yet it is not hopeless, if we are willing to cast aside pedagogical convention and teach according to psychological analysis and our own common-sense. In the ordinary public school, the child may learn his number combinations with considerable accuracy. He may even be as far as decimals, yet if I say, "I had $1.03 and spent $.07, what have I left?" he will ask, "Do I add or subtract?" What he has learned are literally "number combinations," but abstract reasoning is lacking. He is safe with 8+4 and 9+4 and 10+4 because he has memorized them like so much blank verse. Inability to cope with 9+4 under any other title shows that any actual concept of the mathematical fact is lacking. This must and can be built up by starting with the simplest mathematical concepts, increasing and decreasing them by visual, tactual, articulatory, and auditory methods, yet always keeping them so small that the child is not afraid of them. My own eyes have seen this number power grow where there seemed to be absolute lack. It is simply a case of using every means of approach to a child's consciousness. His mind will unwittingly but successfully choose the stimuli best fitted to its peculiarities and work with them.

While the vocational work and that with numbers form the crux of the subnormal's training, much else is of importance if he is to develop satisfactorily toward ultimate independence. His chances are materially lessened by bad health and environment. It is as much the trainer's duty to have out his adenoids, treat his running ear, see that he is scrubbed occasionally, has fresh air at night, and stops his coffee or Dago Red, as it is to teach him his a-b-abs. Moreover, she must build up his physical and social courage by all manner of games and exercises, widen his outlook beyond petty personalities by a discussion of civic affairs, and create in him some ethical ideals by illustration in the schoolroom *morale* and its destruction by wrongdoing.

Many an idiot child has been a worse idiot because he was deprived of his natural right of contact with the world around him. Much undreamed-of development may go on in the subnormal mind if we are not afraid to pour our stores in upon it. Even the pet dog or cat who is the boon companion of a lonely mistress becomes an unusually knowing animal. The baby whose mother talks to it much and rationally early acquires a vocabulary. Why not give the subnormal a chance? Trace for him the geological history of the world he lives on. Tell him tales of bygone nations instead of prim stories of little Mabel and the lark. He can understand the ways of birds and moths and ants, the erosion of a river, the gliding of a sand dune. Much he will forget. So do we all. But his mind's portals will have opened a little wider. Then the processes going on behind the portals we may quicken by Yogi exercises in attention and concentration, with a variety of interest-begetting exercises in quick reactions and accurate reproduction manufactured by our own ingenuity.

One encouraging fact in the training as outlined is that the total effect of the mental exercises—the manual training, work with number concepts, destruction of fear—is stimulating to a surprising degree and shows itself in all branches of the child's activity. If you will pardon another personal illustration—there was in our training-room this year a thirteen-year-old girl. She was with us only a few months when I had to send her back to her own school because she was too irresponsible to come downtown alone to the special room. She was absent half the time of her enrollment on our books. Yet in a final talk with her mother, she said, "I'm so sorry Jane can't stay with you. She has learned more in these few weeks than in all her life before. She does her housework better. She can do her examples all alone, and she even picks up my letters and reads them, which she could never do before."

The interesting point of this was that Jane had almost no teaching in the reading of script while in the training-room, nor had she any assistance which would affect directly her work at home. It was just a case of general stimulation.

One cannot say with authority how far these subnormal children admit of training, because up to the present we have not done this work according to the dictates of either common-sense or scholarship. We have not learned to look upon the training-room as a laboratory where methods are openly experimental. We are afraid to speak frankly of essentials, to own up with candor that not only is sixth-grade grammar quite unessential to ditch digging, but third-grade reading is, as well. When we are big-minded enough to look straight at the educational necessities for enabling a man to put bread into his mouth, clothes on his body, a roof over his head, then we shall be able to train with true wisdom our subnormals, these little men who have not "made good," not to be doctors, clerks, or bookkeepers, but to be laborers out of doors where their minds shall deal with the simple, primary facts of living.

PHYSIOLOGY AND PSYCHOLOGY OF THE DEAF CHILD

CHARLES D. LOWRY, DISTRICT SUPERINTENDENT OF SCHOOLS, CHICAGO, ILL.

The literature on the deaf is extremely voluminous. It would seem as if nothing new could be said. Indeed, this brief paper claims to say nothing new, only to bring together a few old ideas in a form that, so far as I know, they have not heretofore taken; the justification for so doing being the conviction on the part of a comparative outsider that with all the loving devotion and expert skill that have been given to the care and education of the deaf, these most unfortunate folk are still not getting all the advantage that modern science and pedagogy could give them.

It is a self-evident proposition that the deaf person is not a normal individual. The deviation from the normal may be noted in his body, in his mind, and in his emotions. He is abnormal, first, as the result of the injury or defect that caused the deafness; second, as the result of the unusual living conditions brought about by his infirmity.

The first sort of abnormality has been very extensively treated and will here merely be touched upon. Hereditary deafness is generally occasioned by defects in the inmost parts of the ear. Acquired deafness is usually the result of changes in parts of the middle or parts of the inner ear, brought about by inflammation. The inflammation may have been a primary one, or it may have been a secondary effect of scarlet fever, meningitis, or other general ailment.

All these pathological conditions, besides producing deafness, may have other unfortunate effects.

Hereditary influences that produce malformations of the inner ear seem to be closely related to those which result in brain defects. A child born deaf is many times more likely to be deficient mentally than is a hearing child. Moreover, defects of the inner ear are likely to disturb that delicate function, the sense of equilibrium.

The diseases which produce the inflammation causing deafness may leave permanent effects of an unfortunate sort in other parts of the body, as well as in the ears, and thus decrease the general efficiency of the individual. Scarlet fever, like all intense febrile diseases, induces an inflammation of the membranes covering the brain and spinal cord. This affects the gray matter beneath, producing irritability, nervousness, and lessened resistance to all nervous disorders. Such an after-effect is peculiarly likely to follow spinal meningitis, the most frequent cause of adventitious deafness.

The inflammation itself, involving as it does tissues in close proximity to the brain, is a constant cause of danger to that organ. In many cases it gives rise to a very distressing ringing in the ears. In some cases the ringing is continuous and of a fixed pitch; in other cases it is intermittent and may run thru a considerable range of pitch. In the lightest cases this tinnitus distracts attention and interferes with the clearness of all

sensations. In the most severe cases it may cause insanity or drive the victim to suicide.

Moreover, irritation in the hearing apparatus may set up many sorts of subjective auditory sensations. These may be still more troublesome than simple tinnitus. The latter is distressing, but is seldom misunderstood, while these other subjective auditory sensations often are mistaken for real sounds, which may take the form of words and develop into grave hallucinations. Hock states that the ear takes first place among the organs of sense in so far as delusions are concerned.

The importance of this relation between ear affections and mental disturbance is indicated by the statement of Amberg that "50 per cent of those mentally unsound have defective auricles." MacMillan and Bruner report that of one hundred sixty pupils examined in the classes for the deaf in the Chicago schools thirty, or nearly 19 per cent, were found of so low a grade of mentality they had to be excluded from the public schools.

The physiological effects upon the individual that result from the mode of life consequent upon his deafness have not, so far as I have learned, been so extensively studied as have other matters pertaining to his well-being.

One of the foundation-stones of the theory of evolution is the doctrine, "The function produces the organ." A child may be defined as an elaborate and marvelously sensitive apparatus for reacting upon sensations. These reactions are the chief agencies in the growth, development, and education of the various organs participating in them, and consequently they condition the physical and emotional life of the individual. If, therefore, a child by reason of deafness is shut off from one of the two most important avenues of sensation, it must follow that he is also deprived of the beneficial effects of those reactions that accompany these sensations. The bodily tissues that in a normal child would be stimulated by such actions ought, therefore, to show the evil effects of this deprivation. Experimental evidence of this point is not extensive tho items pointing to this conclusion may be found in the notes of several observers. Miss Garrett says that from two to seven years of age the deaf child is at a standstill in the matter of gaining new ideas and as a result his head is smaller than the average. Currier states that teaching the deaf to speak diminishes the tendency to consumption. MacMillan and Bruner quote experimental studies by Binet, St. Hilaire, Farrai, and others which indicate physical and mental inferiority of deaf children. But by far the most important evidence is found in a study of the deaf in the public schools of Chicago, made some years ago by MacMillan and Bruner.

About two hundred forty children were examined thoroly, and, for certain tests, measurements made from some one hundred more were included.

Nearly all were between the ages of six years and eighteen years.

The measurements included those of weight, height sitting, height standing, size of head, strength of grip, lung capacity, motor ability, perception time, and some others.

In all save one of the particulars investigated, it was found that the deaf children were inferior to the average of hearing children, tho this inferiority was more striking in some lines than in others. The exception was in the case of weight, deaf boys being found slightly lighter than the average of hearing boys, while deaf girls were noticeably heavier than normal girls.

The most important results were the following:

"Deaf children have smaller heads than do hearing children, taking as a criterion the length-breadth product, and they are more broad-headed," or, to state it in another way: In length of head 68 per cent of the boys and 71 per cent of the girls are below the average of hearing children of corresponding age. In the breadth of head, 60 per cent of the boys and 69 per cent of the girls are equal to or in excess of the average.

In strength of grip the deaf were found to be somewhat inferior to the average of hearing children, the differences for the right hands being noticeably greater than for the left hands. In other words, the deaf are more nearly ambidextrous.[1] Earlier studies of these same investigators indicate that there is a close relation between ambidexterity and mental inferiority.

The tests for motor ability were of two kinds. The first consisted in noting the number of taps that could be made with an electric tapper in thirty seconds. The second consisted in noting the time required to draw a line with a pencil thru each of a group of one hundred *a's* distributed uniformly over a page. In both these tests the deaf showed marked inferiority and a tendency toward ambidexterity. In the tapping test, 74 per cent of the deaf were below the average of normal children of corresponding ages. In the test of crossing out letters 82 per cent made records poorer than the average for normal children. The motor ability of a normal child was in general found to be about the same as that of a deaf child two or three years older than himself.

This feature of the investigation is most significant. Both of the above tests are really measurements of reaction time. It is natural that a reaction apparatus which is least used will be least efficient. The nervous mechanism of the deaf being shut off from one of the great avenues of sensation will naturally react less often than will that of a normal individual, its efficiency will be correspondingly less.

The most striking of all the tests concerned lung capacity. By this is meant the greatest amount of air that can be expelled from the lungs after a forced inspiration. It was in this particular that the deaf showed the greatest inferiority. In general, their lung capacity ranges from 15 per cent to 25 per cent less than that of normal children of corresponding

[1] Reports II and III, Department of Child Study, Chicago Public Schools.

ages. Expressed in another way, 88 per cent of the boys and 60 per cent of the girls were inferior in lung capacity to normal children.

This condition might have been expected. All the consequences that influence the physique of the deaf child unfavorably are concentrated on the lungs. The flood of sound stimulates to reaction no part of the body of a normal child more than it does the lungs; the diseases that cause inflammation of parts of the ears very often affect the lungs directly and still more often modify unfavorably the passages leading to the lungs; finally, the deaf child, until he is taught to speak, loses that ceaseless exercise that comes from the talking, shouting, laughing, and crying so characteristic of normal children.

It is interesting to notice that in this test the girls from ten years on made a better showing than the boys. Indeed, the deaf girls in several particulars showed a nearer approach to the standards of ordinary girls than the deaf boys did to the records of hearing boys. May not this be due to the fact that the girls by their work in the home find a larger relative measure of activity than do the boys?

The mental and emotional life of deaf children, as of all human beings, is intimately bound up with the subject of language.

We have stated above that every sensation must be followed by an action. Another statement of the same law is that every impression must have an expression. With an infant, any sort of expression will do, any one of a thousand sensations may cause him to shout, move his hand, or kick up his toes. But even the infant soon begins to have a purpose in his expression. He wants it understood that he is calling for food, or wants to be picked up, or wants comfort in some other particular. His language is forceful, but not always clear. With the patient mother it is like the game of magic music, she tries one thing after another until she knows by the cessation of the music that she has found the prize.

This will do very well as long as the child's wants are few, but with his growth of interest comes the need of clear expression that may readily be understood by his fellows.

Nothing is more distressing to the human mind than to be unable to give adequate expression to one's thoughts and emotions, to be unable to make oneself understood by his fellows. Such inability may, according to the nature of the case, produce paroxysms of rage or stagnation of will.

There are several forms of languages, such as gesture, and the making of pictures, but the written or spoken word is immeasurably superior to all others.

A word is the means whereby an idea can be isolated so that it can be examined. In a very real sense, a word creates an idea. It may be true that thinking can be done without words, but certainly very little is done of a very exact or elaborate nature. We can hardly be said to think about

a thing at all until we have a name for it and then have names for every one of its attributes or relations.

We constantly ignore things in our environment for which we have no names, such as certain trees, birds, plants, forms of clouds, etc., and as constantly notice them, think about them, and enjoy them when once they are named for us. What is true of material things is vastly more important when applied to the realm of intangible ideas, as force, honor, history.

Now, the mind is that which thinks, and its growth is due to its performance of its proper function. Without words, the mind would remain very nearly a blank, it would have few tools or materials with which to work, no means of isolating, testing, examining, labeling ideas, no means of comparing its conclusions with those of other minds of this age or of past ages. It could appropriate no ideas from the stock accumulated by other minds. Each individual would very largely live unto himself and die unto himself.

The means of using oral language are the vocal organs and the organs of hearing. Of the use of both of these the deaf are deprived, the use of the hearing apparatus is permanently lost in most cases. The use of the vocal organs is attained by a labor of loving devotion on the part of the teacher and of infinite patience on the part of both teacher and pupil. The immeasurable gain in happiness and efficiency that comes from being able to converse with one's fellows by word of mouth amply justifies all the effort spent in the effort to give speech to the deaf child. It should be begun much earlier than at present is the practice. The age at which children are admitted to the kindergarten is certainly none too soon for the commencement of such instruction. But even this advantage should not stand in the way of giving a large vocabulary in some other form where the oral method is slow in accomplishing this all important end.

The great loss of mental power suffered by the deaf is shown in the following test made by MacMillan and Bruner. Each child was given a page filled with printed words, or rather groups of letters, containing one hundred *a's*. The child was asked to mark off all the *a's* as quickly as he could. From the time taken to do this task was subtracted that required to mark out the one hundred *a's* in the test noted above, the reaction-time test, and the remainder was called the "perception time," that is, the time taken to discriminate the *a's* from the other letters in the various word forms on the page. The younger children required nearly twice as much time as did the hearing children of similar ages, and the older children required about one and one-half as much time as hearing children; 82.5 per cent required a longer perception time than the normal. Here, as in the reaction-time test, the deaf children made records just about equal to those of hearing children two or three years younger than themselves.[1]

[1] The children subjected to these tests were a selected group from which those mentally defective had been excluded. This makes the results the more significant.

The emotional experience of a deaf person is relatively barren. Whatever theory of emotions we adopt, we know it to be true that imitation, whether conscious or unconscious, of the acts of others stimulates in us feelings and emotions akin to those associated with the actions imitated. One person in a group yawns, several others are likely to do so visibly, everyone else is sure to do so in suppressed fashion, and all will be conscious of a feeling of weariness; on the contrary, a smiling face and a merry tune will cheer up any company.

We become aware of the actions and attitudes of others chiefly thru sight and hearing, probably much more thru the latter than the former. We can know by sight of those actions performed in front of us and in good light, by hearing we are made aware of the acts of persons all about us and in darkness as well as in the light.

No activity so commonly or so adequately expresses emotion in all its kinds and shades as the spoken word, and of even more importance in this respect than the word itself, is the tone in which it is uttered. By long patience the deaf child may learn to interpret the spoken word, and an incomparable advantage as a means of social life is thus given him; but he is still unable to know the words of any but the one person to whom he is attending. The give-and-take of conversation, with all its stimulus to alertness, is shut out from him, and the tones of the voice in speech or in song he can never know.

His emotions, therefore, lack the stimulus and the corrective effect coming from all sounds, and particularly that interchange of emotions which is effected by the human voice, and which is the chief means of bringing about unity of thought and action, sympathy, and that quality or sum of all those qualities that are best in us, which we may call humanness.

Ask any teacher of the deaf in what respects the dispositions of deaf children differ from those of other children, and she will probably say that they are not as gentle, or they are a little more savage, or in some other way she will indicate that she notices a gap in the character that shows emotional deficiency. Watch a ball game where deaf boys form one or both teams. Instead of being the quiet, noiseless performance you might expect, you will find it punctuated with such a wealth of fierce noises and savage grimaces and gesticulations, you are sure the whole thing will soon break up in a general mêlée.

Clouston says that no member of the body can be injured without producing an effect on the mind. St. Paul tells us that when one member suffers, all the members suffer. Surely, we see these laws acting to their full limit in the case of the deaf child.

We have noted that the conditions which produce or are associated with deafness, whether congenital or adventitious, have a close relation with those which cause brain defects. Deaf children were found inferior to

hearing children in height, length of body, size of head, motor ability, lung capacity, quickness of perception, and in other physical and mental tests. Their emotional life is narrow and unbalanced.

Perhaps some of those burdens cannot be lifted from the shoulders of deaf children, but surely something more can be done even than is now accomplished.

The general inferiority of the deaf in so many lines of growth, strength, keenness of sense, quickness of action, point to the necessity for a great amount of motor training thru games, gymnastics, manual training, and all forms of expression. These cannot be left to the instincts of the children or given a few minutes a day, as is very sadly the case in the schooling of normal children. The play and the work must be scientifically planned and systematically carried out. They should combine exercises of strength, of dexterity, of quickness, and of endurance, that all the body may be brought into action, the heart strengthened, and the lungs expanded.

This paper has already emphasized the importance to the deaf of training in oral language. It would be difficult to overestimate its value, but of still greater value is training in thinking. Thinking can make little progress without words, and words the deaf child should be given in large numbers while he is still very young. They should be taught by word of mouth, if possible, but if not, in some other way—I could almost say any other way—else the dormant intellect may never be aroused to a point where speech can be mastered, for it is conceded that without a fair share of intellect, speech never can be mastered by the deaf.

No one can read the biographies of Laura Bridgman and Helen Keller without being forcibly impressed with the wonderful way in which the loss of one or more senses may be supplied by the remaining ones. But we must also note that Miss Bridgman had the personal care of a great genius, Dr. Howe, and that Miss Keller has enjoyed the lifelong devotion of that very talented teacher, Miss Sullivan.

Now the triumphs of modern civilization have consisted in giving to all the privileges once enjoyed by the few. This should be done in the case of the deaf. Is this possible? Yes, and more is possible.

Seashore said recently that the most significant development in the next decade would be the coming of the consulting psychologist, who would study a given situation and, from carefully determined data, formulate a course of action that should be successful because it would be in conformity to well-established laws of the mind. Surely in the care of the deaf is need of the consulting psychologist. Every deaf child should be subjected to a careful psycho-physical examination to determine accurately his physical, mental, and emotional status. Upon this diagnosis should be founded a course of care and instruction designed to meet his special needs. At frequent intervals, the examination should be repeated to determine how

effective the treatment had been and to prescribe a new course of action. This plan has been put in practice in the treatment of subnormal pupils in the Chicago public schools with good results. If applied to the deaf, not only would the best of modern science and pedagogy be given to all, but many problems such as the development of the remains of hearing and the utilizations of islands of hearing which have been scarcely touched would doubtless be systematically studied and great good could not fail to result.

DEPARTMENT OF SCHOOL PATRONS

SECRETARY'S MINUTES

OFFICERS

President—Mrs. O. Shepard Barnum, Cumnock School.....Los Angeles, Cal.
Vice-President—Mrs. H. Rosenberg, president, Council of Jewish Women .....Pittsburgh, Pa.
Secretary—Mrs. Orville T. Bright, president, Illinois Congress of Mothers .....Chicago, Ill.

FIRST SESSION—Tuesday Forenoon, July 11, 1911

The department met in joint session with the Department of Physical Education in Scottish Rite Hall, San Francisco.

(For program and minutes see Department of Physical Education.)

SECOND SESSION—Tuesday Afternoon, July 11, 1911

The department met in round table conference for the discussion of the subject of sex hygiene.

At the preceding luncheon four hundred and fifty guests were entertained, but as a still larger number was waiting in the audience room before two o'clock, the meeting was called to order by the president, Mrs. O. Shepard Barnum, half an hour before the appointed time, that all might enjoy the after-dinner speakers, who were as follows: Kate Starr Kellogg, district superintendent of schools, Chicago, Ill.; Very Rev. Walter T. Sumner, member of the Board of Education and chairman of the Vice Commission, Chicago, Ill.; William B. Owen, principal, Chicago Normal School, Chicago, Ill.

Formal discussion of the subject of the day was opened by Romilda Paroni, M.D., lecturer in hygiene, University of California, Berkeley, Cal., who was followed by Lillian E. Ray, M.D., Physical Training Department, Los Angeles High School, Los Angeles, Cal.; C. E. Rugh, associate professor of education, University of California, Berkeley, Cal.; Dr. Spencer, of San Francisco, Cal.; William C. McClure, San Francisco, Cal.; and R. W. Corwin, M.D., of Colorado, member of the American Medical Association Conference Committee.

Dr. Frances M. Greene closed the discussion of the subject of her paper.

The intense interest of nearly one thousand persons in attendance thruout the day, many of them crowded or standing, was evidence of the general anxiety felt concerning this subject.

THIRD SESSION—Wednesday Forenoon, July 12, 1911

The meeting was called to order by the president. The minutes of the last annual meeting were approved as printed. The report of the secretary for the year, including the financial statement, was read and adopted.

The report of the Committee on Revenue for School Purposes was presented in printed form and distributed. The summary of reports from state joint committees and affiliated organizations was presented in printed form and distributed.

The chairman of the nominating committee, Mr. A. L. Hamilton, reported the following nominees for vice-president and secretary, the officers whose terms, by the arrangement of the department, expired at this convention.:

Vice-president—Mrs. William S. Hefferan, National Congress of Mothers, Chicago, Ill.
Secretary—Katharine E. Dopp, University of Chicago, Chicago, Ill.

On motion the report was accepted, the secretary instructed to cast the ballot, and these officers were declared elected for the coming two years.

A vote of thanks was extended to the National Education Association officers and to the Convention League of San Francisco for generous aid in providing a hall under sudden difficulties; to the California joint committee and local committee for indefatigable efforts thruout the year of preparation and for hearty co-operation; also to the local Hospitality, Hotel, and Press Committees.

A motion was made and carried that the Executive Committee be empowered to carry on the work of the department during the coming year.

The first speaker on the program was William B. Owen, principal, Chicago Normal School, Chicago, Ill., who spoke on "Co-operation Between Home and School." Discussion followed by Mary Farnham, dean of women, Pacific University, Forest Grove, Ore., chairman of the Oregon joint committee.

The second address was by Very Rev. Walter T. Sumner, chairman of the Vice Commission, Chicago, on "Child Protection and the Social Evil."

In the absence of William H. Allen, director, Bureau of Municipal Research, New York, N.Y., his paper was read by title and placed on file.

The meeting then adjourned.

MARY E. PRICHARD, *Secretary pro tempore*

PAPERS AND DISCUSSIONS

REPORT OF THE SCHOOL REVENUE COMMITTEE OF THE DEPARTMENT OF SCHOOL PATRONS

This committee was appointed in the fall of 1910, at the suggestion of Mrs. Ella Flagg Young, president of the National Education Association, in response to the request of members of several joint committees of the Department of School Patrons, asking for a definite work on which they might unite.

The subject of school revenue is one which has scarcely been touched by school patrons and yet it is a subject which has to do in the most vital way with the welfare of the schools.

It is interesting to note that school patrons are always eagerly clamoring for better schools, better equipment, and better teachers, but rarely concern themselves with the source from which these must come, namely, "school revenue." It is high time that school patrons bestir themselves to become better acquainted with the manner of obtaining funds for school purposes and unite in each state to obtain, thru intelligent legislation, more revenue.

In short, it is the duty of every citizen, who is interested in the progress of the public schools, after self-examination, to answer honestly the following questions:

Do I pay my own taxes and use my influence to prevent tax-dodging?

Does the large corporation in my state contribute its proportionate share of the taxes?

Am I willing to bear a little larger burden of taxation that the schools may be improved?

An earnest, intelligent woman, who has sent four children thru the public schools, says:

In this day of demands upon teachers and schools—demands which are perfectly justifiable, but which require all kinds of special training for the teachers—the general public *must* be made to realize that special training requires time and money, and, when a teacher makes the larger investment, a larger return in the way of salary is only reasonable.

This can never be until the public conscience is sufficiently aroused to return an honest schedule and to pay its taxes.

The men who demand most from the schools are often the ones who are the most delinquent about their taxes.

A man was heard to say recently that he thought teachers were laying up money all the time. He met them everywhere in Europe and they seemed to have plenty of money. No need of raising their salaries.

Now we know that these same teachers have struggled for years to make such a trip possible and by short meals, poor clothes, and shabby rooms have managed to save enough money to get that which would be invaluable in their work. In some places the teachers have been asked to make a statement of their income and expenditures to prove to some of these recalcitrant tax-dodgers that teachers are not making money.

Even a casual observer must see how much sacrifice is required if, in addition to the bare living, a teacher is to have any sum to spend on fresh and helpful matter for inspiration in his work.

People may differ as to how the revenue for school purposes is to be obtained, but the fact remains that better schools and teachers will cost money. How can this money be secured? By every school patron taking an interest in school-revenue questions and working for helpful legislation in the matter. After due consideration by the committee the following questionnaire was sent to every state superintendent of public instruction in the United States for the purpose of forming a working basis along school-revenue lines for the state joint committees:

February, 1911

MR. ————,

Superintendent of Public Instruction of the state of ————.

Dear Sir: The Department of School Patrons of the National Education Association is endeavoring to co-operate with forces already at work, to bring about better legislation in the different states, in regard to revenue for school purposes.

To this end a committee called the "School Revenue Committee" has been appointed to ascertain, if possible, conditions in regard to school revenue in the different states, the needed legislation along these lines, and suggestions as to how the school patrons may co-operate.

Will you therefore kindly answer the following questions:

First, How is the revenue for school purposes obtained in your state?

Second, Do you have both state and local taxation for school purposes? If so, which furnishes the greater part of the revenue? Do you approve the plan?

Third, What is the basis for the distribution of the school revenue? Do you think there is a better plan? If so, what would you suggest?

Fourth, Is the present revenue sufficient to meet the needs of the schools?

Fifth, What legislation has been attempted (and has failed), having for its purpose the getting of better revenue for the schools?

Sixth, Is there, at present, legislation pending in your state to increase the school revenue?

Seventh, Have you a minimum-salary schedule and a classification and plan of certification which will tend to improve the qualifications of those who are to be protected by this minimum-salary schedule?

Eighth, How are you securing the co-operation of school patrons in working for increased school revenue?

The undersigned would be grateful for suggestions as to how such a "school revenue committee" could be of value in arousing public sentiment in favor of increased revenue for the schools and other needed educational legislation:

Helen M. Hefferan (Mrs. W. S.)
Achsah Brill (Mrs. G. M.)
Cornelia B. Eggers (Mrs. G. W.)
Madeline Sikes (Mrs. G. C.)
James E. Armstrong
Fulton B. Ormsby
W. P. Morgan

A brief summary was prepared from the answers of this questionnaire and is included in a small handbook prepared by the committee to be sent as a suggestion to the joint committees for further work. This handbook also contains a bibliography of such reports, books, and other literature as will furnish adequate information to those who may want it.

Some very definite work was done in Illinois by the co-operation of the school principals and teachers and the school patrons, which suggests what might be done in every state. The Illinois State Teachers Association and the Chicago Principals Club united in their efforts to ask the legislature to raise the annual appropriation of $1,000,000 to four times that sum. A bill to this effect was introduced in the legislature. The two teaching bodies printed much enlightening literature on the subject and sent it (together with lists of the legislators) to all parents' associations and women's clubs asking that letters urging the larger appropriation be sent to all legislators and the Committee on Appropriations. A school patron also went to Springfield with a number of teachers to talk for the measure before the house and senate committees. The appropriation was raised from $1,000,000 to $2,000,000 per annum and a campaign of enlightenment on school-revenue questions was well started in Illinois.

Your committee proposes to study work that might be done along school-revenue lines in each state and earnestly recommends that a place on the general program at the meeting of the National Education Association in 1912 be given to the subject of school revenue in the United States and that it be treated by an expert on the subject who will make definite recommendations of what might be accomplished by school patrons in providing more revenue for the schools.

Respectfully submitted,

Helen M. Hefferan, *Chairman*

SUMMARY OF STATE REPORTS OF JOINT COMMITTEES AND AFFILIATED ORGANIZATIONS, 1910–11

The object of the Department of School Patrons is threefold: first, to ascertain from highest educational authorities the needs of the schools and approved methods of meeting them; second, to transmit this educational message systematically to strong volunteer organizations, national and state and local, which can do tremendous good by such directed and united effort; third, to collect in convenient form, for mutual suggestion and encouragement, brief statements of co-operative work accomplished or under way. Most important undertakings require the concerted effort of the entire community. When possible to segregate the work of individual organizations from general results, in accordance with reports sent in, specific credit has been given.

ALABAMA.—The joint committee has carried on a legislative campaign for state compulsory education; rural libraries; dormitory for women at the State University; and for placing women on school boards. In preparation for this campaign admirable investigations were conducted; statistics concerning illiteracy, proportional school enrollment, and average attendance were obtained. The convincing results were sent, with a strong individual appeal, to the legislators—also facts concerning the relative grades of certificates held by elementary- and high-school teachers, and the great need of increased facilities for equipping teachers.

ARIZONA.—Committee membership completed in February and preparing for work.

ARKANSAS.—Continuing along lines reported last year.

CALIFORNIA.—Joint committee has been very active in assisting with preparations for the 1911 convention of the National Education Association, in San Francisco. The chairman and three members have served most efficiently as the local committee of the Patrons Department.

Strenuous work was done for the teachers' pension bill and for important successful measures, particularly the law raising the age of compulsory school attendance from fourteen to fifteen.

FLORIDA.—Committee membership completed in March; members in touch with educational leaders, volunteer and professional, notably with the School Improvement Association of Florida; meetings planned in connection with the Conference of Education of the South.

GEORGIA.—Close co-operation with the state school commissioner and the state supervisor of rural schools. Comprehensive plan made for unifying the educational work of volunteer organizations; in pursuance of this plan leaflets have been printed for distribution thruout the state, and to the Educational Conference at the State University; the program suggested has already been adopted by some organizations as a working basis; statements of progress are to be requested from all next year. Measures advocated comprise six specific state needs and important general improvements.

IDAHO.—Work reported as progressing finely. Many county superintendents are women. Chairman has asked to have work made a recognized part of state educational plan. The state superintendent has been asked to be ex officio a member of the committee. One of the best departures in the normal school is a class in rural training; students are trained to organize parent-teachers work in the country districts where they shall be called as teachers.

ILLINOIS.—The members of the joint committee in Illinois have been of great assistance to the department's Committee on Revenue for School Purposes and have actively aided its chairman. They distributed and sent to their state legislators individually a convincing appeal for the passage of a bill "to restore the tax of two mills on the dollar for the state common-school fund," which would provide four million five hundred thousand dollars a year. They have reported for their respective organizations as follows:

The women's clubs have for many years directly aided in introducing manual training, domestic science, special instruction in the arts, more intelligent methods of physical culture, progress, and sanitation, medical inspection, school nurses, the bubbling drinking-cup, etc. In some towns they have secured supervised playgrounds; in others they have successfully maintained school lunches; in others a healthful social life for the students has been established, helping to solve the fraternity problem. In one suburb the ladies of a parents-teachers association take turns at the high school in serving afternoon tea to the teachers. "Over the tea-cups" a delightful and helpful social spirit is being developed between teacher and school patron.

In Chicago, the women's clubs have turned over to the Board of Education a fine system of vacation schools. Open-air schools for anæmic children, and especially those threatened with tuberculosis, have absorbed the efforts of the Chicago Public-School Extension Society, an organization composed of delegates from about seventy clubs. These children are supplied with proper food, and with extra clothing when necessary. The results in the improved health of the children and their ability to continue school work are most gratifying.

This year the clubs of the state are urging the following legislation: The two-mill tax and a sufficient appropriation for the State University to insure a needed addition to the Woman's Building, which houses the Department of Domestic Science, and provides for the social life of the girls—also for residence halls for women students, the need for which grows more evident each year.

Congress of Mothers.—Fourteen new parents' clubs have been organized, doing social extension work especially in high schools as a substitute for sororities and fraternities. Other work not reported except legislative: Two-mill tax bill, bill for the protection of children in the street trades, amendment for the ten-hour labor law for women.

Council of Jewish Women.—Chicago conference, including thirty clubs, contributed to the maintenance of a kindergarten for four years; furnished typewriters to evening classes; contributed to Permanent Public-School Extension Committee, and Public-School Aid Society, out-door schools, to the support of a trade school, and to scholarships. One established the first school lunchroom, formed the Public-School Aid Committee for needy children, and is now employing a visiting housekeeper to teach mothers to prepare food properly. All are furthering the cause of social centers, free kindergartens, open-air schools, and improved legislation.

Association of Collegiate Alumnæ Legislative Report.—A College Women's Industrial Committee was organized to raise money for the ten-hour bill; several hundred dollars were raised, and members attended the hearing at Springfield; a permanent committee was formed for assistance in future industrial legislation. Other bills aided were for the two-mill tax, regulation of child labor, suffrage, and increased appropriation for the Chicago Public Library.

Iowa.—Continuing lines of effort reported last year.

Representative for the Federation indicated an organized plan for the furtherance of vacation schools, free lectures, scholarships, publicity for educational needs, improvement in moving-picture shows and other amusements, plans by which mothers and teachers can co-operate where the school course does not provide for domestic-science training, where classes are needed for working boys and girls, where enjoyable hours are needed by working women; co-operative work with county superintendents for rural teachers' meetings and other activities.

Kentucky.—The joint committee has been intensely interested, with others, in the extension of school improvement leagues, and is now rejoicing in the outcome, which they helped to bring about. The leagues have been placed directly under the control of the state department of education and a paid officer has been placed in the office of the superintendent of instruction, to organize and supervise leagues. The Southern Education Board assists with the expense. The officer chosen is a member of the joint

committee. By co-operative effort, medical inspection has been obtained in two cities and promised in another; two women have been elected on the school board in one city; sanitary improvement has been made. The representative of one organization reports the equipping and maintaining of a model school, and the providing of six scholarships.

LOUISIANA.—The chairman reports work of the affiliated organizations and of local societies as follows: *Club women:* Penny lunches, participation in the women's auxiliary of the juvenile courts, assistance in gaining public baths, better school buildings and teachers' salaries, special teachers, introduction of manual training and domestic science, and women on school boards. *Jewish Women's Council:* Penny lunches, girls' clubs, boys' clubs, sewing school, free gymnasium. *Mothers' clubs:* Co-operating with school authorities for the betterment of conditions. Local or state societies. *Public-School Alliance:* Arousing public opinion for better pay for teachers, open-air schools, vocational schools; instrumental in securing three new high schools and one normal school. *Playground Association:* Five well-equipped and supervised playgrounds—aided by the *Story-Tellers' League.*

MAINE.—Joint committee organized and membership completed in May. Plans to make a careful study of the field to find out what ground the agencies already at work are covering; especially to find out how it may be of assistance to school improvement leagues and the Traveling Library Department. By request of the chairman the representative of the Federation reports in part: "This, the first year of service, has been a very active one and our aim has been to concentrate the work on the points emphasized by your directing body. Stress has been laid upon the subject of personal hygiene in all the schools of the state, and the state superintendent has co-operated. This subject is taught in the normal schools and also at the summer institutes. A lecture on personal and sex hygiene has been requested by our committee to be presented before the Teachers Annual Association." Other objects reports are: scholarship fund to provide specially equipped and superior teachers for rural schools; schools of these "Federation teachers" aided by gifts of furnishings and supplies; university extension aided. Household economics is to be added to the curriculum of every state normal school this fall. Five hundred circulars were mailed to club women all over the state and special attention was directed to "physical upbuilding, in co-operation with your department."

MARYLAND.—The active work of the Maryland state committee has been largely co-operative in character; but a specific effort has been made to arouse a state-wide interest in educational advance and civic improvement, especially in rural communities.

Circular letters were sent to the editors of the newspapers in each county which have presumably the largest circulation, requesting the establishment of a department or a column devoted to education and civics; and a list of topics upon which it was proposed to secure brief, readable articles was inclosed. Favorable replies were ultimately received from editors in ten out of twenty counties; and through the co-operation of the affiliated organizations a number of articles have been secured. Copies of each article were sent simultaneously to fifteen editors.

The committee has kept in touch with the activities of various organizations which are interested in school-attendance legislation, moral education, sex hygiene, sanitation, improvement in school buildings, the use of schoolhouses as social centers, directed play, the study of the problems of the rural community, child labor, the juvenile court, and the probation system.

The Federation has concentrated its efforts upon plans to secure a satisfactory state school-attendance law. Nineteen lectures and talks have been provided during the past year, newspaper articles have been written and prominent county educators, school commissioners, and influential citizens have been interviewed.

The Southern Association of College Women has devoted the year to efforts to standardize the high schools of this state and to arouse interest among girls and boys in higher

education. Committees have been at work investigating the causes and extent of illiteracy in the state.

The Council of Jewish Women has been making a study of the system of medical inspection in vogue in the city of Baltimore and will devote considerable time next year to means of obtaining more adequate medical inspection.

One member-at-large reports for thirteen parent and teacher clubs which held monthly meetings in the schools, discussing educational topics and raising money to equip several school yards with playground apparatus. Nineteen counties report similar clubs.

Massachusetts.—The reports of the joint committee and of the affiliated organizations show methods particularly constructive and valuable. State educators were consulted, notably Dr. David Snedden, state commissioner of education, and asked to suggest a line of work that would be most helpful to the community of the various organizations who should incorporate it in their yearly programs. As that of vocational training was strongly recommended, the joint committee arranged a conference which brought together those who were experienced and informed, and those who would be interested in learning the needs and furthering the work. The committee was most fortunate in securing the wise and efficient aid of Dr. Laura Drake Gill, well known in many educational positions of prominence and the past president of the Patrons Department, who presided at the conference. The principal speakers were Dr. Snedden; Mr. Meyer Bloomfield, chairman of the vocational bureau; Miss Florence Marshall, of the state Board of Industrial Education; and Mr. Stinson, master of the Agricultural College in Northampton. Much general co-operative effort is reported, from campaigns against the housefly to those for conservation of national resources. The committee wishes to thank the affiliated organizations of the state which have contributed funds for the joint committee's work.

The representative of the Federation refers to the preparation for educational work made some years ago by a questionnaire investigation of the condition of the public schools thruout the state, which led to definite suggestions and recommendations that are still the objects of club effort; special interest in industrial and moral education.

The Congress of Mothers reports eleven parent-teacher associations added to the fifty organized the year before, with more in prospect. A state convention has been held and a free-lecture service list prepared. Boston branch of the Association of Collegiate Alumnæ has a committee on rural education, and one on local education which serves as an outlook committee in educational affairs. Thru this it has made investigations and been represented on the Massachusetts Council of Education, which is working on such questions as the pension system, the part-time vocational school, state aid, and certification of teachers; it has followed the work of the School Voters' League; and has helped keep open the Hospital School for tubercular children.

Michigan.—Persistent and strenuous efforts for improved common-school legislation in co-operation with State Teachers Association and State Grange, also for the removal of school affairs from politics. Under the auspices of the Ann Arbor Branch of the Association of Collegiate Alumnæ a very representative meeting of school patrons, making an audience of three hundred, was addressed by the state superintendent of public instruction on needed school laws. Labors of the committee devoted to a bill to give commission government to all city and town districts; also to textbooks and supply legislation; also to measure prohibiting fraternities in public high schools; assisted the Federation in furthering a measure to aid indigent parents in obeying the compulsory school law. One member-at-large is closely associated with the State Grange numbering sixty thousand members, and has been instrumental in securing the appointment of a co-operating grange committee on rural-school interests. Many county granges have considered school topics at their meetings and have aided the school commissioners in corn contests by pupils; some local granges appoint committees to visit all neighboring schools and report with suggestions; at least one repeatedly invited teachers and school boards to their meetings and did much to improve school grounds and buildings.

MINNESOTA.—The chairman's words are memorable, because they express combined enthusiasm for the good done with a rare appreciation of the unimportance of minute distribution of credit among the doers. She says:

"I am reporting a few things which our committee has pushed in the state of Minnesota. Just how much of the progress made is due to our efforts is problematic. The *Song Celestial* points out that 'The fool saith "This I did and that I wrought." The better-lessoned mind knowing the play of things invisible standeth aloof even from his own acts.' Without attempting therefore to discriminate the work we have accomplished from that we have watched with pleasure, we note some lines of progress in the state: The individual drinking-cup, sanitary soap, and sanitary towels have appeared in our schools during this year. The temperature of our schoolrooms, which used to be kept dangerously high in the cold Minnesota winters, has been lowered, and fresh air from windows and doors substituted for the air supposed to be made pure by ventilating systems. The medical inspector and school nurse are now a part of our school system. Playgrounds are multiplying. . . . . The school census has been taken by members of women's clubs and normal students in training. The truant, the backward child, the sick child have been discovered and relief has been undertaken. The social assistance rendered in quiet fashion by the best women in the community to young adolescent boys and girls without social opportunity, has been the result of circulars sent out through the clubs. This work was planned by the joint committee last year. Results show that continued work in this direction will bring an abundant harvest."

MISSISSIPPI.—Last year did successful state-wide work toward securing the establishment by the legislature of a Teachers Normal Training School. This year have worked for the establishment of a juvenile reformatory. Requested that local organizations consult and assist school authorities. As a result library books have been supplied, also pictures, attractive programs, valuable prizes for various forms of school improvement. Articles on sanitation and hygiene have been furnished for educational columns in county newspapers. Improvement of health conditions in local schools is to be emphasized next year.

NEW HAMPSHIRE.—After organization, the needs of the schools and desirable changes in school laws were ascertained by the committee in conference with the state superintendent of public instruction. A bill was introduced in the legislature to remedy one of the indicated deficiencies. The representative for the Federation reports extensive educational work, approved by the state superintendent, adding that "the clubs have become almost a unit in their steady giving of both sympathy and financial aid." Clubs contributed from one to fifty dollars toward a scholarship fund for normal-school students. Widespread and varied efforts have been enlisted in the cause of improved industrial, moral, and rural education and the health of school children.

NEW MEXICO.—Chairman made careful comparative study of educational provisions in state constitutions, consulting state and national authorities, as well as the territorial leaders. Committee took active interest in the report of the Education Committee of the Constitutional Convention; secured signatures and sent petition requesting specially desired provisions. Plan to collect information concerning the school lands of the prospective new state, thus preparing themselves intelligently to oppose any selfish disposal of school lands. Chairman has drawn up far-reaching working program for committee and recommends to the department the adopting of uniform constitution and by-laws for state committees. Is emphasizing the Health Committee subjects of ventilation and sex hygiene. Has arranged to have its annual meeting in connection with meetings of the Territorial Educational Association, and in preparation therefor is studying questionnaire regarding the proposed constitutional provisions for handling school lands.

NEW YORK.—Committee studying local conditions to determine field for most effective work; considering definite plans for state-wide work for the establishment of social centers.

OREGON.—The subject of hygiene has enlisted the efforts of the Oregon joint committee for two years, in co-operation with the grange and the county superintendents; this year the chairman conducted a special investigation of the work in hygiene among

the higher schools. At a meeting of the committee held by invitation of the state superintendent, plans for the improvement of country schools were discussed, lantern slides urged for exhibits in various school districts, and active co-operation was begun for two projects: one to secure greater interest in school elections and better support from taxpayers; the other to popularize the "Annual School-Meeting Day," when by invitation of the state superintendent the people of each district shall meet in an annual picnic, discuss school questions, visit the school grounds and buildings of the vicinity, and aid by improvement of poor conditions, or by expressed approbation of good ones. The superintendent had prepared leaflets, including a statement of the qualifications of voters (male or female) and the committee heartily acceded to his request to distribute these leaflets with urgent letters to all the affiliated organizations.

Tennessee.—Chief work has been for adequate medical supervision of school children. The Federation has been greatly interested also in a school for mountain whites. The *Council of Jewish Women*, besides much beneficent work, is trying to develop properly supervised playgrounds. The *Congress of Mothers* is organizing associations where parents and teachers may learn better how to do the work they have in common. The chairman is also a general officer of the Southern Association of College Women, and has prepared and sent to all the representatives of that organization on the various state joint committees a very suggestive list of twenty-four questions relative to the Patrons Department work for the schools, the effect of which in information, instruction, and stimulated interest should be very great.

Vermont.—The chairman reports that the educators of Vermont are making a comprehensive study of conditions and most advanced methods whereby the standard of its schools may be high and its youth receive an education that will best fit them for life—the training of the hand as well as the mind and a higher conception of what constitutes citizenship. The problems involved in the preponderance of rural schools have been met to some extent by the concentration of the rural schools in the central village schools, the consolidation of adjacent communities in one school, and the supervision system. Results are manifest in improved school buildings, supplies, teaching, and attendance; the greatest problem as reported is the provision of high-school training better suited to a larger percentage of the pupils. Among important new legislative enactments are mentioned: the establishment of a State Normal School, a State School of Agriculture, with additional instruction in domestic science and manual arts; teachers' training courses in high schools and academies to provide trained teachers for rural schools, medical inspection, and teachers' pensions. The Federation is reported as doing strong civic and educational work, as supporting a scholarship fund for the training of teachers for rural schools, as hearing at its recent convention six educational addresses, including one on social hygiene. Appended to the report is a very comprehensive and instructive leaflet from the State Teachers Club on ways and means of helping schools, school children, and teachers.

Washington.—As a result of a meeting called by the retiring chairman after conference with the state superintendent, the members decided to work through their respective affiliated organizations for amendments to the Child-Labor Law, teachers' retirement fund, and higher appropriation for salaries in the State University. The chairman recently appointed is the president of the *Washington Congress of Mothers*, and reports that that organization has persistently brought before the public the need of concerted action in regard to children's health. It has included the discussion of sex hygiene, open-air schools, playgrounds, and medical inspection of school children on its programs. Next year an effort will be made to have sex hygiene taught in the public schools.

West Virginia.—Committee has worked to further the cause of industrial training in the state. Will be represented at the National Education Association by its chairman and decide therefrom the plans for the coming year.

WISCONSIN.—Committee has worked individually for all bills tending to improve the rural schools and those permitting a wider use of school buildings and grounds. The *Congress of Mothers* has recently been organized and expects immediately to take up work outlined by a meeting of the faculty of the State University.

WYOMING.—Requests any literature available from the National Education Association and reports the Federation as active in beautifying the schoolhouses and grounds and having bubble fountains installed.

CO-OPERATION BETWEEN HOME AND SCHOOL

WILLIAM BISHOP OWEN, PRINCIPAL, CHICAGO NORMAL SCHOOL, CHICAGO, ILL.

The problem of the relation of home and school is, in its entirety, too complex and extensive for adequate treatment, even in outline, within the limits of an address suitable for this occasion. It is my privilege to speak to you about the need of co-operation between home and school, as viewed from the standpoint of the school. By way of introduction, I should like to recur to a bit of educational history.

The great modern movement in education which was inaugurated at the turn of the nineteenth century with the work of Pestalozzi, had from the outset as one of its fundamental aims the promotion of co-operation between the home and the school. There were phases of the movement in its earliest stages which would justify one in calling it a home-education movement. Attention was directed, on the one hand, to the strategic position of the mother in the child's education. Pestalozzi's *Leonard and Gertrude* succeeded in arousing the world to a realization of the opportunities, the duties, and the actual and inevitable influence of the mother in determining the education of the children in the home. With the recognition of the importance of the mother and the home came the realization that the mother needed a better method of procedure than that supplied by tradition or suggested by instinct or affection. This was the beginning of the attempt to work out a method of infant education. When, on the other hand, attention was directed to the school as an existing institution, it was found to have made little provision for the early years of childhood. The school and the home were both engaged in the task of supervising and directing the education of children. But in the individual child's life there was a period when the directing hand of the home was withdrawn and that of the school had not reached out to lay hold and guide. Moreover, this was not only actually so in the existing historical situation, but the break in continuity threatened to be greatly emphasized and increased if the movement for the betterment of the work of the home proved successful in method and result.

It was to meet and solve this situation that Froebel organized the kindergarten. His work permanently changed our educational system, by extending the school downward to cover the years not specifically

under organized educational control and by supplying an educational theory and practice for this period that has proved itself sound by reason of its capacity for progressive modification to meet the advance of scientific thought as well as the demands of school practice. With Froebel's work accomplished, one might well have concluded that the problem of school and home had been solved. The child received its education at home until it entered the kindergarten, when the school assumed control and retained it until formal education ceased. Moreover, the theory and method according to which the home and the school were to do their separate tasks were in harmony thruout.

If we return to the present situation, which is the direct outcome of the movement just referred to, we find that the division of labor and of responsibility between the home and the school has remained essentially unchanged, but that there is a growing conviction that a new sort of co-operation between the two must be worked out if our educational scheme is to be effective. I shall attempt to show why this co-operation is necessary, what the nature of this co-operation must be, and by what means it may be brought about and maintained.

First, then, co-operation between home and school is necessary because they are at work on a common problem and are pursuing a common aim, the education of individual, specific boys and girls. The commonplace nature of this declaration may at first lead to a ready acceptance that would reduce it to a truism. What I mean to say is this: The life of an individual child is an organic, continuous whole. It passes thru countless phases, presents infinite variety and traces out its own curve of progress. But these phases are not unrelated; this variety is not fortuitous; the curve of progress is not without its law. In a word, we cannot understand or work successfully with a child if we attempt to regard him as fragmentary, divisible, unstable, and changing. He may be all of this and more at times and for certain purposes. But he is at all times and for our main purposes to be regarded as being what he really is, an organic whole. Now, this integrity and unity of the child's life is not an abstract or logical thing, a concept or a name by which we economize effort in our thought of him. It is a practical unity and integrity which the child himself is aware of and seeks to maintain and further. The most obvious evidence of this unity of the child's life is his physical body, which is, at the same time, the basis on which his own sense of personal identity rests and which serves us as ground for personal identification. We do not think of the physical child as fragmentary, divisible, and discontinuous, in spite of the obvious changes which it undergoes. He is the same child from birth to maturity, in the home, in the school, on the playground. He bears one name, has a recognizable countenance, carriage, and disposition. All our purely unreflective attitudes toward him make the unconscious assumption of the unity and integrity of his physical life. Again, his consciousness is a unit

and a whole. To the child, his mind is one just as his body is one. His mental identity is less obvious and tangible than that of his body, but it is also more intimate and real. We, too, as we learn to know his mind in action, judge of it as if it were one and the same mind at work. Moreover, the unity of the body and the unity of the mind are not separate and different, but are summed up together in experience.

Now, there are three important facts about this unity and integrity of the child's life that have direct bearing on the subject under discussion. The first is this. The unity is not fixed and static, but progressive. It reorganizes itself. It is always there, but constantly differing from what it was an hour, a day, a year before. It begins in early childhood in the form of a sort of equilibrium of physical impulses and instincts with which the babe is endowed at birth. It maintains itself under favoring circumstances with little show of disturbance and with favorable results in the health and comfort of the child. As time passes, with physical growth and mental awakening, the reorganizing goes on apace. Sometimes there are periods of storm and stress. New forces surge into the consciousness of the child and where just now there was order and control, there suddenly seems to be nothing but chaos, and unity seems the last word that could be justly applied to the situation now under the domination of conflicting and unknown forces. Again, a period of calm and confidence follows. All the past seems to flow into the present, conserving all the results of previous effort and thought. There are few surprises, no sudden lapses, no failures. The current of life moves on in ways foreseen and desired and under perfect control. But it is always the same child—the same to him, the same to us. The same, yet ever new. Yet within the scope of this reorganizing unity are found all the possibilities of education, all the degrees of success or failure, all the values of our moral world, all the desires of the human heart. On its intellectual side we call it wisdom; on its moral side, character.

In the second place, it is an ideal unity. That is, the ideal form of it is always the object of our endeavor. We are trying to realize it. It is not ideal in the sense that it cannot be made real, but in the sense that it is being made real. There is always a unity that the child's life does have, and one that it ought to have. These two are not unrelated save in thought. It is out of the unity that we have that we construct the ideal that we seek. So we are always dealing with a life in some sense organized, while at the same time our aim is to organize it. Our language bears ample testimony to our sense of the totality, the unity, the integrity of individual life and experience. We say that men are "broken up" by trying experiences, they are "distracted" by cares and anxieties, they "go to pieces" under excessive moral strains. That is to say, the whole which they have constructed is no longer intact and the product of its activity can no longer be traced. In short, we may say that education is just the process of

constructing and organizing such an ideal unity in the life of every child, beginning with a few primitive impulses and instincts and ending with a matured mind and character in possession of self-knowledge and its own ideals.

In the third place, this unity is social. That is to say, it is social in its origin, social in its meaning and reference, social in its function. In plain words, the sort of unity that comes to a child's life will depend entirely upon the social group or groups in which that life finds its place. In the judgments of everyday experience, we reveal clearly that we recognize, and act on this view. We put the individual back into his family group and excuse or blame him as he remains true to or departs from the life of that group. "What would you expect?" is the instinctive excuse offered for one whose life is constructed in a different social medium than our own. A degenerate is one who has fallen below the standard of his class, physically or morally. The actual separate stimulations to action come from the group environment. Those that are repeated in the group life produce in the individual his habits and his ideals. The standards of morality, taste, and efficiency of the group become the standards of the individual. So in a modified, but very true, sense the individual reproduces in himself his own family group. For this reason, if we wish truly to understand another, we must read him in the light of the group life that has infolded him from earliest years. The basic unity of his life is a miniature of the larger group unity. So, too, he can act and most freely in the group where he first learned action. He is at home there. He has reached out to sound the sympathy, test the authority and try the wisdom of that group. He has found himself in finding the group and is only truly himself when he is acting within it. So the dominant social group to which a child belongs is the most constant and effective agent in organizing, maintaining and elevating his life. To ignore this fact is to neglect the means of promoting educational progress, while we stupidly lament the lack of moral training in the public schools and discuss the gap between the home and the school.

Now, the two social groups that encompass the child's life are the family and the school. They not only officially and formally divide the child between them, but they actually monopolize his time, absorb his energies, and furnish his mind. That the family, as a social group, is a dominant influence in a child's life, is a commonplace of our social and educational doctrine. But it is not so well recognized that the school is also a social group of almost, if not quite, equal influence. Yet this is not only true as a matter of fact, but it is a truth that should be the starting-point of our educational theory and practice, as well as of our school organization and administration. That the origin of the family is in the unfathomable past and that of the school within the historical period does not prove the school to be less effective as a social group. Its actual

present function in the life of the children is the only basis on which an estimate of its worth and value can rest. That it does rank with the family in importance and scope cannot be doubted.

Perhaps I may now draw the practical conclusions toward which all that I have said has been pointing. The school needs the co-operation of the home for the same reason that the home needs the school. They have, I have already said, a common aim. Both are striving to organize the life of the children as they pass from infancy to maturity so that confusion, uncertainty, weakness, and failure shall be superseded by clearness, decision, strength, success. Both profess to make character-building paramount. But this common aim must be achieved thru work with individual children in concrete situations and in the solution of definite problems. If the two social groups do not work in harmony, the life of the child is torn asunder; that which constitutes from birth to maturity the fundamental aim of education, the creation of a unified and organized personality, is not only not furthered, but is actually thwarted by the very agencies that alone could secure the desired results. The child must be able to pass from one social group to the other without experiencing a conflict in demands, a relaxation in authority, a lessening of sympathy. The fundamental social activities of both groups must be in harmony, that the continuity of the child's experience may be unbroken and that his life may have unity, integrity, and real progress. So you see that it all comes to this, that the common aim of home and school is not common because both chose it, but because it is one child that goes in and out among them.

Again, the school and home must co-operate because they have also different subordinate aims. If the home could do what the school does we should not have schools. But it is to be noted and emphasized that these subordinate aims can be attained only as the common aim of both is at the same time subserved. The school cannot neglect the larger life of the child on the plea that its task is to give intellectual instruction. More than ever before in the history of education is it clear that to deal successfully with any aspect of child life you must take into account the whole child. What a child lives at home determines what he will do in school. What he lives in the school determines what he will do at home.

We may now proceed to state briefly what the nature of co-operation between home and school should be. It should be one of concerted and harmonious action in determining the larger social life of the child with a definite and clearly recognized division of labor in the matter of specific tasks and activities. The school should have this for its principle of co-operation.

The home, working directly or thru society, must create and maintain the conditions under which the specialized tasks of the school may be successfully prosecuted. The principle of co-operation for the home should be this: The school must guide the home in its efforts to create and maintain the conditions under which the child may succeed in the specialized

work of the school. It is the business of the home to utilize the school in securing the education of the child, not to turn over the task to the school. No parent is so humble in station, so mean in fortune, so deficient in knowledge, that he may excuse himself for not supervising and directing the education of his children. What he needs for the fulfillment of his duty in this regard is not special and technical knowledge, but common-sense and determination and love. Failures in school are not due to technical difficulties in subjects studied, nor often to stupidity of children; they are due to an unregulated life which it is in the power of the humblest parent to restore to order. The school is the consulting specialist for the home. On the other hand, it is the business of the school to put itself at the service of the home and in season and out of season to insist on the kind of co-operation that will make individual and social success possible. It is a poor and degrading conception of the school that limits its function to the classroom work of a few hours each day. To the school has come the social opportunity of the centuries. It may reach out with knowledge and wisdom and encouragement to the homes whose supreme chance for realizing their ideals lies in the education of the children.

I have time for only a word about the methods of co-operation between home and school, and what I shall say is designed to complete the analysis of the problem rather than to discuss the subject. There are two general methods of co-operation between home and school. Both are necessary, neither alone is sufficient. The one method is the indirect, thru social effort and organization; the other direct and immediate. We are just beginning to realize the possibilities and necessity of the indirect method. Under this head may be mentioned the movement for the increase of school revenues, the care and ventilation of school buildings, medical inspection of school children, the care of the teeth and eyes of the children, the inspection of schools, the elaboration of efficiency tests, the promotion of the playground movement; in a word, all that we class under child welfare. Here all who have the good of children and the race at heart may co-operate with others to make the school what it ought to be. But I should like to point out that valuable and indispensable as this work all is, it amounts at best to creating the necessary conditions under which the work of the school may best be done. The direct co-operation of the individual home, the father and mother, with the school, the teacher, is that form of social interaction which alone guarantees to the child moral progress and stability, intellectual growth and self-realization.

DISCUSSION

Mary Frances Farnham, dean of women, Pacific University, Forest Grove, Ore.—It is indeed a privilege to speak as a school patron to the Department of School Patrons on the subject of community co-operation. Co-operation is now a great social force. As a result wonderful achievements are accomplished. We have The Brotherhood, fraternal orders, "Get Together" clubs, and this great co-ordinated department of

women's organizations. In the annual calendar of "The Service" fifty or more conferences were listed, with the request that omissions be supplied. To give greater efficiency we have auxiliary organizations, of which a notable one is the Bureau of Municipal Research, with its expert corps of workers under the direction of Dr. W. H. Allen, who we hoped would present today the opportunities for effective citizenship thru the relation of school patrons to the public schools.

In the solution of the problems before our school patrons and their affiliated organizations, we must intelligently co-ordinate right thinking and well-directed action. Such as we have we must give to this service—even ourselves—if we would have our city, or our rural community, a happier place in which to live. Miss Strong's "Know Your Own City" campaigns in the Pacific Northwest resulted in concrete action. Yesterday's conference revealed appalling conditions that imperil the children. We are not to sit still as tho confronted with the impossible, but this intimate knowledge should stimulate to intelligent and concerted activity. The civic call in many of our cities is not so much "the bigger city," but the better city. In a conversation the other evening a gentleman said that in his home city extension of the municipal boundaries was under consideration, not so much with the idea of enlarging the census returns as to secure the votes of right-minded suburban citizens.

In a very real sense we may affirm that what the people collectively want they will have; whether, as in Chicago, the school children insist that the council uproot poison ivy from vacant lots, or, thruout the country, the citizens demand a saner Fourth of July. Both to forestall evil and to provide counter-safeguards are alike civic responsibilities. But the scope of school patrons is prevention rather than reform. In rural communities especially the school should again become a true neighborhood center. The first achievement of the joint committee of Oregon was co-operative work with the women's clubs to secure the passage of a bill for the use of school buildings as neighborhood centers.

One great source of our municipal shortcomings is the indifference of good citizens; we know of many cases where the "rainy-day vote" has elected the inefficient mayor or councilman. There is another and perhaps more insidious peril—that of ignorance and mental confusion. In an Oregon town the citizens were called upon to vote for the issuing of bonds for a new high-school building; the bill was voted down by the taxpayers, who alone are entitled to vote on school questions. The alleged reasons were the already heavy indebtedness of the town for other school buildings, for a new water system, and for proposed paving of the streets. The facts were that school bonds had been paid as fast as they matured, and the only reason they had not been paid in full was the reluctance of bondholders to relinquish profitable investments before the time for maturity; that the water system was a source of profitable revenue; and the paving, except crossings, would be done by property owners. This case of mental confusion is probably paralleled in many cities. To promote intelligent interest in school matters the superintendent of public instruction in Oregon has co-operated with the school patrons in calling attention to the importance of the annual school meeting. He proposed to make the occasion a festival with a basket luncheon, inspection of school buildings and grounds, and a general discussion of needed improvements to precede the business meeting. The joint committee assisted in distributing printed circulars with these plans, and the qualifications of voters; the result anticipated was a more generous budget. Memphis has taken the initiative in budget reform by printing it in full in the papers.

Our department is manifestly increasing in importance as a co-operative agency. We have for our constituency the strongest and most intelligent organizations of American womanhood; we are allied with superintendents of public instruction and school boards; we have the confidence of parents and teachers; the Grange, which as an organization aims to develop public life, gives us its hearty support. In the renaissance of our public schools, it will be our compensation to have shared with all these forces in "the conservation of the human child."

CHILD PROTECTION AND THE SOCIAL EVIL

VERY REVEREND WALTER T. SUMNER, MEMBER OF THE BOARD OF EDUCATION, CHAIRMAN OF THE VICE COMMISSION, CHICAGO, ILL.

I did not understand until a few days ago that I was to speak at this conference. I shall bring to you, therefore, thoughts that are not correlated, and possibly at times not closely connected with the special phase of the subject which I have chosen.

I shall speak very frankly and very plainly. I hope that you will not be offended. This is the time when we must speak frankly and we must use language which is understood.

I am going to speak on "Child Protection and the Social Evil," and what I have to say you will find amply covered in the Vice Commission Report of Chicago, a commission appointed by Mayor Busse and the Chicago City Council for the work for which ten thousand dollars was appropriated; a commission appointed to study the social-evil conditions in Chicago.

One thing that impresses those who are studying the social evil is the ignorance of the average citizen, and yet the certainty and the finality with which he will express himself in regard to an absolute solution of the problem.

Prostitution is not only afflicting the vicious and the sinful, but it is contaminating the innocent as well. It is leaving in its wake sterility, paralysis, insanity, the blinded eyes of little babes, the distorted limbs of deformed children, physical rot, and mental decay. It is time that we, the educators of the country, should take up in some way, either as a body or as individuals, some movement looking to the stoppage of this awful physical, moral, and social degeneration of the race.

There are two kinds of prostitution. There is the "commercialized industry," if you please, and clandestine prostitution. It is impossible to speak at any great length of the latter. It is subtle, and tho less known, probably exists to quite as large an extent as the first. It is more dangerous in some respects, perhaps in all respects. Both have their dangers to children, but it is the commercialized industry as it has a bearing upon children that I desire to emphasize.

I desire to say here at the outset that I stand absolutely, as do the thirty members of the Commission unanimously, for constant repression of the social evil as the present remedy, and absolute annihilation as the ideal. After this Commission had seen the awfulness of the human wreckage and the awfulness of the social and vicious condition which existed because of this evil, the vote was absolutely unanimous for this decision of which I speak.

Let me say a few words with regard to the immensity of the problem. Some of you come from smaller towns and feel that it is not your problem.

Your towns and villages are sending the supplies to the larger cities. What is more, you probably have the social evil right in your midst and yet are ignorant of it. There are very few communities of five thousand inhabitants or over that have not a more or less commercialized institution of prostitution. Your first duty is to learn of local conditions. The immensity of the problem, because it is the most tremendous problem we have to face, should not discourage us. As we have met the great plagues and infectious diseases, and have cut down the mortality so tremendously by education and preventive measures, so we can take this social problem and by wise, honestly administered repression change the conditions and cut down the awfulness of it to a minimum.

So long as the hearts of men are bad, so long as men are the chief offenders, as they are, there is going to be more or less of a residue, even if we carry on a campaign of repression. I say again, in this my impromptu address to you, that the ultimate goal to which we must all point is a religious and moral solution to this question. We may approach the problem from an economic or social point of view. Such an attitude will help. But the final solution will come only in the raising of the public conscience to a certain ideal of morality where open or clandestine prostitution, commercialized or socialized, will not be permitted to exist.

There are two standards of morality in every community. Those of us in the larger cities, I think, perhaps see it the most. For instance, we allow certain dances to take place upon the stages of exclusive halls by women more or less naked, all under the guise of art. At the same time we condemn similar dances, not any worse in many respects but held in less respectable surroundings. On the one hand, we allow certain people in the gilded palaces, the finer hotels, who flaunt their viciousness in silks and satins; and on the other hand, we close up the resorts which are catering perhaps to the lower grade of society, and drive from the streets the poor working-girl in shabby clothes who is trying to eke out a living which her scanty wage does not provide.

The social-evil problem is one that the public does not care to discuss openly. But open discussion and frank exchange of opinion must take place in the interest of enlightenment. Knowledge of the problem is the first requisite. It is such statements that I made to you yesterday, taken from the Vice Commission Report, that startle us into a desire to know, and, knowing, to do more to fight the evil. I repeat some figures which I gave yesterday. They apply to the city from which I come—a city no worse than the other large cities, and not so bad as some others. Do we realize the immensity of the commercialized evil until we know that the profit in one city is fifteen million dollars a year, on a basis of only one-quarter of the known prostitutes, or sixty million of all of them; how the police force, which has the absolute control of the social evil, in the face of such a sum of money can become absolutely degraded; how any policeman

starting out honest and efficient to handle a certain definite phase of the social-evil problem is almost bound to become corrupted; and how we, a little group of people trying to fight it from a moral, civic standpoint, find there is a tremendous force where financial gain is the one consideration, and where mortals are of no account? It is no wonder that we are fighting an uneven and unequal battle, even tho we are making great progress thruout the country.

What are some of the causes for the downfall of girls? First, the lack of ethical and religious teaching. I do not know if it is possible—perhaps not at the present time—to put into our public schools the teaching of morals. God grant the time may come when we can. It is difficult to separate morals from religion. It is impossible to put religion into our public schools. That is one of the great problems in the teaching of sex hygiene in our public schools.

I, personally, do not think that the teaching of sex hygiene simply on the grounds of hygiene or physiology is going to bring us very far. I think morals must be coupled with it. But ignorance of ethics and morals is one of the greatest, perhaps the greatest, cause for the downfall of girls, and in some way they should be taught.

Second, the economic condition of the unskilled worker in industry. I wish I might enlarge on this.

Third, the large number of seasonal trades for women.

Fourth, abnormality.

Fifth, unhappy home conditions.

Sixth, careless and ignorant parents.

Seventh, broken promises.

Eighth, the love of ease and luxury.

Ninth, the craving for excitement.

Tenth, ignorance of hygiene.

These are some of the reasons for the downfall of girls, leading to a life of prostitution.

A few words with regard to the source of supply: One of the greatest sources of supply is from the ranks of the immigrant. It is a pitiable thing to see the exploitation of the unprotected, unknown strangers in a strange land, who are met in New York or some seaport town, like San Francisco, I presume, by panderers and procuresses, who simply carry them off to what is commonly called "white slavery."

Another source of supply is the crowded tenements of the great city. The bad housing conditions of our communities furnish a great supply to the industry. Let me illustrate: Take the poor people in the congested districts; they rent rooms in a little tenement of three or four rooms. They take in roomers, these roomers being generally unmarried men. If there are children in the family, then we know what the result is so apt to be. The bad housing condition is the cause of a large part of the supply, and is worthy of your consideration.

One other great cause is divorce. Until society is rid of this awful curse of divorce and the easy remarriages of divorced people, this constant menace to society is bound to lower the morals of society and make prostitution—especially the clandestine type—easy and semi-respectable. Until the curse of divorce and remarriage is taken away, we are going to have not only the lowering of the public conscience, but a constant source of supply which is a very important part of the social-evil problem.

A fifth cause is the economic question. Now we come to one of the most important; it is almost inexhaustible, and it is almost unanswerable. If you know anything about the department stores, if you know very much about the industries, the factories, you will understand that the factory girl is paid a very much better wage than the department-store girl. Her average is about nine or ten dollars a week; the department-store girl's six or seven dollars a week. The department-store girl is the one to be pitied. It is a clear case of arithmetic; so much wage, so much for her room, so much for her board, and when you get thru, there is not a penny left for even a newspaper, to say nothing about dressing; and where is the difference coming from? We do not wonder that there are thousands of casual prostitutes in Chicago and New York who are simply existing because of the fact that they are underpaid. Yet we must be fair and just. There are many girls who are in industrial life today who are having an uphill battle constantly and yet are keeping themselves pure, even tho the battle is a hard one. All honor to them that they can and do succeed. But it is for us to face this economic condition which exists in the department stores, and remove one of the greatest menaces to the young girl.

And I want to speak here with regard to the children in connection with the economic conditions—the boys and girls who are peddling newspapers and gum on the streets in the large cities, and especially to the messenger boys. We find the messenger boys are being used thruout the so-called red-light or segregated districts in the large cities, and are being used for all sorts of purposes: they are sent to get liquor; they are sent to get cocaine or other kind of dope; they are sent on all sorts of errands, to one place and another; and we have instances where on last New Year's Day or last Christmas Day, these boys were invited into the resorts that they might have a Christmas present from the girls, who state that it is the custom on Christmas Days to render service to the messenger boys, free of charge, as a gift to them. And these are boys fourteen to sixteen years of age! The little street venders are out on the streets nights, seeing all the debauchery and vice which comes after nightfall, and being brought into contact with vicious conditions and people. Here is one of the menaces to childhood—the economic question of a child on the street.

Another menace is the five-cent theaters. Here is a force—a constructive force—which might make for a great deal of good for childhood, and yet wherever children are congregated, even for a good object, there is

always the danger of vicious conditions and people. The five-cent theater at one time in the city from which I come was most dangerous to children. At the present time it is not so dangerous. At any time it may become a menace, however, and must be watched. Where there are hundreds and hundreds of these theaters, in which the lights are extinguished; where children are all huddled in with older people, there is bound to be a more or less immoral influence. If there is a moving-picture show in your town or a cheap theater, do something to investigate, first, the kind of pictures that are being shown; and second, the surroundings, the atmosphere into which these children are going. You may find conditions which, if changed, may save many a child.

Another danger to the working child is the temptation to have some of the—to her—beautiful things which she handles in her daily routine, which her scanty wage will not allow. I recall one instance of a girl who went thru two years of high school and had to go to work at the age of sixteen. She worked two years and was then getting four dollars and a half a week. One night she took a little pin from the department in which she worked, to wear to a dance, and returned it in the morning. She was found out and reported, and was arrested. The manager and several other officials of the store came into the Juvenile Court and demanded that the girl be sent to some reformatory. Now, we may have, and I hope we all have, condemnation for theft, but certainly we have more condemnation for a soulless corporation or company which would demand the ruining of a girl simply because when she was underpaid, when she did not have even enough for the necessities of life, she took some little bauble in order to decorate herself; and I am glad to say that the judge of the Juvenile Court discharged the girl with an admonition, and gave to the manager of that store such an exposition on the economic condition under which the girl worked, and his attitude toward her while under temptation, that it will be a long time before he will forget the lecture which he got.

Another source of supply is our employment agencies, which send help to resorts—ignorant help, girls who do not know where they are going, and are lured into an evil life. We find many employment agencies quite willing to send colored help to resorts where they will not send white help. This brings us to a phase of the evil where a tremendous injustice is being done. Why is it that we discriminate between the colored people and the white people in this social-evil problem? If there is a district that is given up to prostitution, you will find crowded in it and around it and about it, the colored people of the community. We seem to think that the colored people are as undesirable as those engaged in the social evil. We take a people which is not able, perhaps, to raise itself and which needs the support and the aid of the white people, and we compel that people to live in the most vicious conditions and in the most vicious neighborhood in the whole city. It is an injustice to a race which needs our support

rather than our unjust discrimination which is forcing them downward in the social scale.

Another great menace is the midwife. If you know nothing about those conditions in your community, then investigate them. The medical men or women who are here this morning will bear me out in the statement that there is a tremendous danger to society in this group of people alone.

The most vicious thing in a community in connection with the social evil is the saloon. Now, I am not what might be called an extreme temperance advocate. I believe in temperance, and the greatest curse on society today is intemperance, and I heartily indorse all that Dr. Jordan said yesterday at Berkeley; but in the last year I have become convinced that the most vicious influence in connection with the social evil is the saloon. It supports and exploits it. No greater step could be taken than the separation of these two institutions.

The next most vicious influence is the dance hall; and I mean by that the dance hall patronized by the working classes. If I had the time today, I could give you instance after instance of investigation which we made in some two hundred sixty or two hundred seventy dance halls in Chicago, of the awfulness of the situation that obtains there. The girls come in simply for a social evening; they have no other place to go to; their home-life is not happy. Perhaps they are boarding in some boarding-house, which is not, as you can imagine, a pleasant place to spend an evening; they cannot stay in their attic room; they are hungry for pleasure. They should have it. They go to the dance hall; there they find the cadet, the panderer, and the man about town; and there begins the downfall of many and many, we might say hundreds, even thousands, of girls. Nearly all the vicious dance halls have a bar in connection; and you know, as well as I know, the moment that a young girl commences to drink that is the beginning of her downfall. And so the dance hall is the second most vicious influence in connection with the bringing into existence of these unfortunate women.

We talk about changing the amusements—the public amusements. Children are going to play; if they cannot get moral surroundings, they are going to find immoral surroundings. As I have said before, we have heard a great deal about keeping the children off the streets. We have got to make the streets decent for the children to play in. Let us open up the schoolhouses as social centers. Where can we find such beautiful roomy halls for dances, for theatricals in the evening, and clubhouses for play hours? Where can we find better constructive work than using the schoolhouses? Last year we tried that in Chicago. It has been a wonderful success. They have been crowded night after night, and the children have been kept off the streets. Given healthful amusement along constructive lines, and it will do much. And I say the same about the churches. How absurd to keep them closed. Let the parish houses and the buildings which are used for Sunday-school rooms be open; let them ring with the

laughter of children constantly. Let the tired mothers use them at night. Let them be the forums for the expressions of those who feel that injustice has been done. Let them be everything that is necessary to furnish healthful amusement and playground for the community.

I have said that the greatest contributing factors in the social evil were, first, the saloon, second, the dance hall. I want to add one more—*men*. Men! the whole problem is a man's problem. We are all the time putting up rescue homes. We are all the time bringing the girls into juvenile courts. We are all the time sending them out to the bridewell or county prison, or whatever it may be called in your community. We are all the time hammering down on the women. It is not a woman but a man problem.

Go with me some night from the department store; go with the little girl who came from your country town thinking she could earn a livelihood in the city, a stranger to everybody, unloved, unprotected, uncared for; go with her to that little cheap boarding-house, and see the little cold attic to which she goes. The house is filled with men and women, coarse, vulgar, and in many cases, immoral. She is hungry for the necessities of life. I do not believe that girls go wrong for luxuries to any great extent; they go wrong for the necessities of life; they are hungry for food, hungry for necessary clothing, hungry for companionship, hungry for love. I see that girl in that attic; and see her as she is preyed upon by unscrupulous men, who are not sportsmen enough to get out and hunt a fair prey, but take this defenseless girl as their game and ruin her.

To repeat, this is a man problem, not a woman problem; and until men realize this and until men are conscience-stricken, we are not going to get very far in its solution.

DEPARTMENT OF RURAL AND AGRICULTURAL EDUCATION

SECRETARY'S MINUTES

OFFICERS

President—James A. Barr, superintendent of schools.....Stockton, Cal.
Vice-President—Benjamin M. Davis, Miami University.....Oxford, Ohio
Secretary—E. E. Balcomb, Rhode Island Normal School.....Providence, R.I.

FIRST SESSION—Tuesday Forenoon, July 11, 1911

(Joint session with the American Nature-Study Society and the School Garden Association of America.)

The meeting was called to order at 9:30 A.M. by President Barr. In the absence of the secretary, L. A. Robinson of New York University was appointed as acting secretary. The program was taken up as follows:

"Agricultural Nature-Study," Clayton F. Palmer, Gardena High School, of Los Angeles, Cal.

Discussion, E. D. Ressler, professor of industrial pedagogy, Oregon Agricultural College, Corvallis, Ore.

"School Gardening in Hawaii," Vaughan MacCaughey, College of Hawaii, Honolulu.

"Potentiality of the School Garden," Cyril A. Stebbins, Department Agricultural Education, University of California, Berkeley, Cal.

Report of Committee on Course of Study in Agriculture, E. C. Bishop, Department of Agricultural Extension, State Agricultural College, Ames, Iowa, chairman.

The president appointed the following committee for the nomination of officers for the following year:

E. D. Ressler, State Agricultural College, Corvallis, Ore.
C. F. Palmer, Gardena Agricultural High School, Los Angeles, Cal.
V. MacCaughey, College of Hawaii, Honolulu, Hawaii.

Due to the fact that the Committee on the Course of Study was unable to report fully upon its work, it was moved and carried that the committee be asked to continue its work for another year and that the general council of the National Education Association be asked to appropriate the sum of two hundred and fifty dollars for carrying on the necessary investigations of the committee.

SECOND SESSION—Thursday Forenoon, July 13, 1911

(Joint session with the Department of Normal Schools and the Department of Physical Education.)

The meeting was called to order by President Barr and the program was taken up as follows:

"Agriculture and Domestic Science in High Schools with Special Reference to Community Work," E. T. Fairchild, state superintendent of public instruction, Topeka, Kans.

"Agriculture and Domestic Science in Normal Schools with Special Reference to Preparing Teachers for Community Work," John R. Kirk, president, State Normal School, Kirksville, Mo.

Discussion, Riley O. Johnson, State Normal School, Chico, Cal.; Susan B. Sipe, Washington Normal School, Washington, D.C.

"Physical Education in Elementary Rural Schools," L. R. Alderman, state superintendent of public instruction, Salem, Ore.

Discussion was led by Edwin L. Holton, professor of rural education, State Agricultural College, Manhattan, Kans.

The Committee on Nominations recommended the following officers for the ensuing year:

For *President*—B. M. Davis, Miami University, Oxford, Ohio.
For *Vice-President*—Cyril A. Stebbins, University of California, Berkeley, Cal.
For *Secretary*—E. E. Balcomb, State Normal and Industrial School, Greensboro, N.C.

The report was adopted, after which the department adjourned.

L. A. Robinson, *Acting Secretary*

PAPERS AND DISCUSSIONS

AGRICULTURAL NATURE-STUDY

CLAYTON F. PALMER, GARDENA AGRICULTURAL HIGH SCHOOL, LOS ANGELES, CAL.

The history of nature-study has exemplified, as well as any one subject could do so, one of the most predominant characteristics of the American people, and one by no means confined to the teaching fraternity. I refer to our national tendency to be "off with the old love, and on with the new," or more explicitly, to snatch at every new idea, working it for all there is in it, then casting it aside when a new one appears. This apparent instability is at the same time our weakness and our strength, as a nation. It is but an expression of the restlessness of our time—the price that we pay for our reputation as the most progressive nation.

To those patient souls who were largely responsible for the vitalizing current introduced into our curriculum thru the nature-study idea, there was, no doubt, much discouragement because teachers were so slow in adopting the newer conceptions. But that was soon to be made up for by such a grand rush to enlist under the nature-study banner as the outside world has seldom witnessed in the introduction of any school subject.

For nearly a score of years now, the grade pupils of the United States have borne up bravely under the greatest variety of experimentation imaginable. Teachers with little or no first-hand knowledge of natural history have been inoculated with the abiding enthusiasm of such able leaders as Bailey, Hodge, Bigelow, and others, and with the most admirable intentions, have courageously plunged into the maelstrom of life histories of insects, habits of birds, seed germination, calendar studies, etc.—not to mention the physical and chemical atrocities—all committed in the name of nature-study. Doubtless we have each of us done our part toward amplifying these results, but we will trust that they have really done more

good than harm. Our failures have certainly served as stepping-stones to a more sane conception of what nature-study stands for.

In earlier days, culture was gained principally from classical education. The development of science has been largely responsible for the practical turn which education has taken in these latter days of vocational training. But progress in this direction has been accomplished only thru hard-fought contentions between the old and the new. Insurgent and regular have always been pitted against each other, even in the comparatively tranquil development of our educational systems.

We spent many years in going thru the experience of educating the man first and the specialist afterward. Because a long course was necessary before it was possible to specialize in any given subject, a large proportion of pupils dropped out of school without being fitted properly for any sort of life work. All trades suffered from this, and its effect upon agriculture was especially unfortunate. The rich farms of our ancestors became impoverished thru ignorant methods of farming, and many were abandoned. The young people preferred the hazards of day labor in the city to the long hours and hard work of the farmer. Powell says, "In 1895, there were forty thousand able-bodied men found going into the city of New York from the country." The rural schools were in a serious state of decline, and many were closed for want of pupils. The number of abandoned farms was on the increase each year, and big-minded men saw danger ahead. But how could the farms best be improved, and intelligent men be kept upon them? Surely in no way but by making farming more remunerative, and country life more attractive.

Clearly, education of some sort must be depended upon to bring about better conditions among our agricultural classes. That was early recognized by our educational leaders, but they were also convinced that it was too late to do much for the farmers themselves, directly. For many years, the government, agricultural colleges, and experiment stations had been trying to help them, but only a few availed themselves of the assistance offered. The masses were not being reached, and attention was therefore turned toward the boys and girls attending the rural schools.

Bailey tells us,

> The direct application of nature-study to agricultural education appears to have been started by the Agricultural College of Cornell University. This was in 1895 and 1896. It is advisory and propagandic. Its object is to interest teachers and pupils of the public schools in nature-study work with special reference to the agricultural conditions.

Again the movement is described as being

> to create a larger public sentiment in favor of agriculture, to increase the farmer's respect for his own business.

Cornell led in this movement from the first, sending out nature-study leaflets which directed and inspired the teachers, not only of New York

but of other states as well. Later, the propaganda was turned in favor of agricultural education in a more direct way.

In any discussion on nature-study as to the nature and content of the course to be offered, one is continually bound to consider certain limiting conditions. In the first place, we all realize that the greatest weakness lies in the lack of properly trained teachers. We must naturally look to our normal schools to supply the demand. But in these institutions, which are efficient for the most part, not enough attention is given to these particular subjects which are necessary to the training of successful nature-study teachers. There has been too much exploiting of the erroneous idea that anyone with a little knowledge of plants and animals, with a little of method thrown in, can teach nature-study. To be sure, some strong teachers of this subject have taken up the work with little or no training, but they have possessed certain other qualities which have greatly helped in making up the deficiency. They have succeeded where the average teacher would have failed, but that doesn't recommend the method.

Few of our higher institutions of learning seem to have grasped the significance of the nature-study movement. A teacher may be graduated from a college or university where good technical training has been given in botany, zoölogy, chemistry, physics, geology, etc., and yet fail in an attempt to teach agriculture or nature-study, tho both are founded upon these very sciences. The trouble lies in the fact that they are applied sciences, and one has to sort over his information, rearrange it, correlate it, and flavor it with spirit and sympathy. Then, and only then, can he orient himself with respect to these subjects as they relate themselves to the lives and interests of grade pupils. Nature-study, which is really worthy of the attention of the would-be teacher of today, should be offered only after the student has had a grounding in the essentials of several sciences.

The college instructor in biological or physical sciences is not expected to concern himself, in the teaching of his subjects, with the possible difference of viewpoint of those of his students who may later teach nature-study. He is not concerned in pointing out to his students the interesting relationships which exist between his subjects and those of related sciences. Upon whom, then, rests the responsibility of correlating these subjects into a harmonious unity? Manifestly, upon the student himself or herself, unless perchance some kind Providence provides the opportunity for one to take a good course in nature-study, based on the supposition that the student has already had the elements of the sciences upon which the subject is reared.

It is the lack of understanding of this mutual relationship of the biological and physical sciences that constitutes one of the chief weaknesses in present day nature-study teaching. Our colleges and universities are too often not concerned with the business of training teachers of any sort. But their graduates fill the positions in our high schools and normal schools.

What is the result? The college graduate naturally tends to duplicate his or her college course in these lower institutions. To be sure, in a few years, experience and common-sense will bring about an adjustment; but what a loss is entailed meanwhile!

In some states this condition has been remedied to a considerable degree thru the extension of the normal course to three, four, or more years. Such an arrangement gives the college graduate or normal-school student sufficient time for working over the more technical courses into presentable form for use in primary or secondary schools. Many times, however, the prospective salary does not seem to warrant the teachers-to-be in making any further preparation for their work than the law requires.

The demand for teachers of nature-study for our grades, and of agriculture for secondary and normal schools, is greater than the supply. Already it is clearly apparent that in order to carry on the good work without further delay, many agriculture teachers will, for some time to come, have to be made-over science teachers. Some of our ablest teachers of secondary-school agriculture were not trained specifically for such work; but they were well trained in the sciences, and recognizing the demand for agricultural education, have leaped into the gap and done good work. They have succeeded in spite of the lack of special training, because of experience and hard work; but that does not make the need of that training any the less important for the rank and file of would-be teachers of agriculture.

After much experimentation and discussion, extended thru two decades, we have come pretty generally to recognize what nature-study stands for. The purpose, briefly stated, is to develop and preserve an intelligent attitude toward nature. This of course implies a spirit of sympathetic investigation, coupled with an endeavor to make a proper and profitable use of the information gained in the study of any of her innumerable forms.

Any division of nature-study must, from the nature of things, be largely artificial. Yet we must classify objects for convenience of study, and natural objects are no exception to the rule. No course can be a complete unit by itself, or remain entirely divorced from others. If there is any one word that comes nearer to expressing the great truths in nature than another, it is the little word "unity." All life is one and related; everything has its influence upon everything else, and is in turn influenced by all that exists. The physical sciences, alone, are dead, while the biological sciences without them are "confusion worse confounded." To say that the one is more important than the other is like saying that the heart is more important than the lungs. To be sure, the function of the one is purely physical, while that of the other is more difficult to understand; but if either one were to cease performing its functions for a short time, the other would be incapable of action, and death would promptly ensue.

In pedagogical circles, we hear a great deal to-day about nature-study, biological nature-study, agricultural nature-study, school-gardening, ele-

mentary agriculture, general science, and so forth. To each individual teacher, each of these has a different significance, while at the same time being closely related. It might therefore be worth one's time to consider these briefly in their relationship to each other, and to a rational scheme of education along the lines of natural history. Moreover, I assume that any of these will aid in interesting the child in nature, and make life fuller for him, whether he spends more of his life in the city or in the country.

Most of us will probably admit that the subjects under consideration justify their place in the curriculum from either one or both of two standpoints—the propagandic or the educational. I am inclined to believe that the original purpose of nature-study holds as true today as it did at the beginning. To be sure there are the valuable by-products, but may we not assume that increased interest in agriculture is the logical and desired result of the introduction of these subjects into the grades? If this be true, there arises the all-important question of determining, if possible, the particular phases of work best adapted to the different grades. And this is one of our most difficult problems.

It is pretty generally conceded, I think, that some phase of nature-study may profitably be taught in each grade below the high school. The teacher of the lower grades gets her cue from the natural interests of her pupils. The skillful teacher of nature-study draws out her pupils; their interests become hers. For the time being, she becomes a child again with them, at the same time attempting to enlarge and intensify their interests.

If, as teachers of nature-study, we would endeavor more earnestly thus to grasp the interests and outlook of the pupils in the different grades, we could lay out a less artificial course in nature-study. Such would certainly present a more natural succession of topics; for after all, we should rather guide the pupil in his investigations than attempt to force upon him the study of forms which may not be of natural interest to him. We should take his interests as we find them, and make the best use possible of them, as the capital stock of our enterprise.

At first, the curiosity or interest of the child is easily satisfied, because it is superficial, and local, as one might say. He is incapable of recognizing the far-reaching relationship of universal truths. As he passes from grade to grade, his study of his environment may naturally lead to a deeper inquiry into some of the many problems that confront him. The proper sphere of activity which the teacher may exercise is largely confined to assisting the pupil in sustaining his interests. This is accomplished by directing his attention to the more important things, and pointing out the interesting relationships.

It thus becomes evident that objects and discussions which might fail in arousing interest in one grade, might find a ready response in another. The recapitulation theory applies, here, in an interesting way; the child, in the few years of his mental (as well as bodily) development, rapidly

passes thru the stages which untold centuries have required for the human race to encompass in its ascent. The viewpoint of the young human animal has much to recommend it to our serious consideration, but it is very difficult for the adult to put himself in the child's place.

Of all innovations which have been introduced into our schools in the interests of nature-study, the school garden doubtless deserves first place. Introduced into our schools for the first time about twenty years ago it has adapted itself to many and varying conditions. At the present time, it bids fair to prove our most important agency for the teaching of agricultural nature-study. Its æsthetic value is recognized everywhere, and unlike most other forms of nature-study, it is destined to become of considerable economic value as well.

The school garden, if large enough, might well be employed for the use of all grades, at least up to the seventh or eighth. But in that event, great care must be exercised to vary the work in an orderly way from year to year. This probably constitutes, if not the best means, at least the basis, for agricultural nature-study. An excellent opportunity is here afforded for the growing of our national forage and fiber crops, cereals, etc. If possible, this sort of agriculture should be carried on in connection with related work in geography. In addition to these crops, much instructive work can be done in the propagation of plants, planting of bulbs, making of cuttings, potting of plants, making of lawns, etc.

In discussing this portion of my subject, I desire to express the opinion that many schools are neglecting one most important phase of nature-study work. I refer to the proper planting and care of our public-school grounds. There are few where no planting can be done because of lack of space; at least a narrow border might usually be planted next the building, and a few corners are usually also available. The average teacher of nature-study too often lacks the initiative, and because it is understood that there will be no one to care for the plants during vacations, this bit of planting even is not done. Probably the teacher is not so much to blame as the conditions that prevail in many of our city systems, for it is chiefly the city schools that I have just now in mind. If a city is to build up nature-study that is worthy the name, it must be the duty of some properly qualified person to devote at least a large part of his time to the work. Courses should be carefully planned, the strongest teachers placed in charge of the work at the different schools, and the supervisor should have plenty of time to visit the schools often. A nature-study teacher who is responsible for her results to one who knows what good work is, will be quite likely to do better work than she will do when responsible only to the principal of her school, who is generally no better informed upon the subject than she, if as well. Definite work to be done, and intelligent and sympathetic encouragement from those to whom she is responsible, will do much toward making her efforts a success.

Many schools experience considerable difficulty in securing suitable plants for use in ornamenting their grounds. The teacher of nature-study often has no very clear ideas as to just what kinds are best suited to the needs of her particular school, or if she has, it may not prove such an easy matter to secure the kinds wanted, on account of the expense involved. It is frequently possible to secure cuttings of desirable plants from homes in the neighborhood, but unless the school has facilities for rooting them, they avail nothing. And as a rule, the plants which one is likely to receive at the hands of really well-intentioned people, who give because they are interested in the work of the school, are a motley lot of specimens. Not only are they most likely to be of inferior sorts, but also of all colors of the rainbow, and not enough of any one kind to be of any real use. A few of the more desirable wild flowers are far superior to scrubby, cultivated sorts. It is time enough to enlist the aid of the pupils in protecting the plants about the school when the latter are of a character that will naturally command their interest and respect.

If the majority of our city children came from homes where good taste is displayed in the planting and care of the dooryard, we might be able, with less misgivings, to overlook the unfortunate lack of such in connection with our schools. If we are ever to develop an appreciation of the refining influence that comes from properly planted and attended home grounds, we must begin the good work in our public schools. There we hang copies of masterpieces upon the walls to teach good taste in art; we play from the great composers to instill a love for the best music; we go to the works of the masters of our language in an attempt to teach power and beauty of expression; and many of our newer school buildings are models of architecture, but alas for the grounds about our schools! When will our school officials awaken to an appreciation of this great opportunity that is being neglected?

But the situation is really not so hopeless. The problem of ornamenting our school grounds is already being solved, in part, at least, thru the services of our city park departments. And what could be more logical? The parks and schools belong to the city, and it would seem that the latter might properly be regarded as belonging to the former, so far as the grounds are concerned. The parks grow large quantities of plants of all sorts, and could supply the schools with abundance of them at very little cost to the city. Moreover, in Los Angeles, at least, the foremen seem glad to render that service. If need be, the work of caring for school grounds, during such times as the janitor is not on duty, could easily be left to the park department. If some provision could be made for the care of plants on school grounds the year round, doubtless our teachers would take more interest in ornamenting them. Here again, the great need of a supervisor of nature-study, who is also a well-trained horticulturist, to look after these

interests of a city school system becomes apparent. Without such, all efforts looking toward the building up of strong nature-study work will be seriously handicapped.

I have apparently recommended that the planting and care of our city school grounds be given over to the city park departments; but I do not believe that to be a wise move, except in cases where, for some reason, teachers and pupils are found incapable of handling the situation. Here is one of our best opportunities for teaching the sort of co-operation which leads to the development of much-needed civic pride. We are justly proud of our free schools, but our boys and girls must not be allowed to suppose that they are therefore released from all obligations to society. If we receive freely, freely we must be willing to give. Eventually each individual is by justice and duty bound to return to society at least the equivalent of what he has received from it; otherwise he becomes a parasite and an impediment. These facts should be borne in upon the inner consciousness of every boy and girl, and the sooner, the better.

Moreover, the habit of interesting oneself in the affairs of the community—the broader altruism—should be formed while the citizens of tomorrow are yet in school. It will then become second nature, and they will more naturally enter upon the duties of citizenship in later years. As a matter of fact, every boy and girl always has duties of citizenship; that they do not recognize them is our fault, not theirs. Much of our education is unfortunately out of harmony with this idea, and it is time that we began actively to correct the fault. And where can this community interest, and spirit of generous co-operation be stimulated better than in the planting and care of our school grounds by the school citizens themselves—the children?

Here is a task for all that one has of tact and perseverance; but if his courage holds out, the reward will prove gratifying. More difficulty will likely be experienced in dealing with the upper grades, because as children grow older, the overmastering desire for ownership takes possession of them. This, aided by the fact that as a nation we have become so highly commercialized in our dealings with each other, makes it difficult to secure the services of even our boys and girls unless substantial remuneration is forthcoming.

Two things are certain; a change in the attitude of our young people toward community interests is imperative, and the sooner the campaign opens, the easier will the problem be solved. We have taken this stand at the Gardena Agricultural High School of Los Angeles, and tho our ideas have been tried but one year, the results have been very encouraging. Different portions of our school grounds are assigned to the care of certain students. It gives us an excellent opportunity for teaching responsibility by the most natural method by placing it definitely upon the individual.

DISCUSSION

E. D. Ressler, professor of industrial pedagogy, Oregon Agricultural College, Corvallis, Ore.—The writer of the paper has had particular reference to the teaching of agricultural nature-study in the city schools. Our special problem in Oregon is to accomplish some results of value in the rural schools. The Oregon school law makes the teaching of elementary agriculture compulsory in the elementary grades, but does not examine the teachers in the subject. While the content and method of the course and the administration are necessary and important phases of the subject, our first duty is to provide some means of preparing the teachers who are compelled to teach agriculture. We are undertaking to provide this instruction by summer sessions in our Agricultural College and hope to be able to supplement this next year by extension courses, both for teachers and pupils. Our new law providing for rural-school supervisors presents an opportunity to secure expert direction in the field if these supervisors can receive some training. The law requires all counties having more than sixty school districts to appoint one supervisor for not less than each twenty districts. Many counties have already selected such supervisors, only a few of whom have had any scientific training in agriculture. If public sentiment and educational leadership in Oregon can be brought to bear, gradually these supervisors may be trained or replaced by especially trained people and thus the supervision side of the question be taken care of. There remains, of course, the much greater problem of providing competent and interested teachers. It will be some years before we can hope to make any advance here, but we mean to keep on trying. Our Agricultural College realizes both its opportunity and responsiblity in the matter of leadership and has earnestly set to work.

SCHOOL GARDENING IN HAWAII AS RELATED TO AGRICULTURAL EDUCATION

VAUGHAN MACCAUGHEY, THE COLLEGE OF HAWAII, HONOLULU, HAWAII

The general nature of school-garden work in Hawaii has been stated in a paper published in the *Southern Workman*, July, 1910, and later reprinted as a bulletin of the College of Hawaii. The present discussion will be confined to the particular relationships in Hawaii between school gardening and agricultural education in general.

In order to understand the educational situation in Hawaii with reference to school gardens, one must know the general conditions of life. The population of Hawaii consists, approximately, of thirty-five thousand Hawaiians and part-Hawaiians; twenty-seven thousand Latins, chiefly Portuguese; ninety-five thousand Orientals, chiefly Japanese; and twelve thousand Teutons, chiefly Americans and English. The natives have been farmers and fisher-folk since the dawn of their history. Indeed, the nature of their island world was such that there were no other means of livelihood. Their food supply came almost wholly from the fertile lowlands that engirdle the islands, and from the bounteous ocean.

The limited area of the islands restricted nomadism; the entire lack of large game cut off hunting; and the absence of grazing domestic animals prevented pastoral life. The Hawaiian was compelled, perforce, to accept a stable agricultural existence.

The Americans and English have been the exploiters, developers, promoters, of the the agricultural resources of the islands. To their ability is due the phenomenal growth of the sugar industry, which has systematically fostered the importation of large masses of cheap labor, mainly the Orientals and Latins above-mentioned. The sugar industry was also the main factor in the annexation of Hawaii by the United States. The immigrants brought in to supply the plantations were naturally drawn from agricultural classes, accustomed to country life and to farm labor. They live very simply, receive small wages, and raise large families, as do similar classes the world over.

The indigenous and immigrant population of Hawaii is therefore, both by heredity and necessity, almost entirely agricultural. Living on a relatively low plane of life, they have desired but scant education for their children. With the exception of those in Honolulu and Hilo (the only cities in the territory) the schools are country schools, usually near sugar plantations. With the exception of a few large ones in the above-named cities, the schools are almost entirely primary schools, covering only the work of the first four grades. Of the 20,245 pupils in the public schools in 1910, 17,369 were in grades one to four inclusive; 2,486 in grades five to eight inclusive; and but 254 in high schools. There is but one first-grade public high school in the territory.

In 1910 the nationalities of the children in the public schools was as follows: Hawaiian and part-Hawaiian, 30 per cent; Orientals, 40 per cent; Latins, 20 per cent; Teutons and others, 10 per cent. Hawaii's great school problem is therefore to furnish primary education to non-English-speaking peoples of the lower classes. It is in the solution of this problem that the school garden, as a part of agricultural education, can play so important a rôle.

Agricultural education in the strict sense of the word has never received adequate attention in Hawaii's schools, any more than it has in other school systems. The reasons are the same here as elsewhere—inappreciation of manual activities, lack of trained teachers, etc. In addition, the necessity for teaching English to non-English-speaking peoples has tended to make the curriculum lean toward drill work in language.

The majority of the white men who first came to the islands were unfamiliar with agricultural processes, especially those connected with tropical agriculture, and for a long time had little interest in it. The sugar industry, and other farming enterprises, are managed by large corporations on the plantation system, employing principally alien labor. In Hawaii there has never developed a permanent community of white farmers working their own land; indeed, social and industrial conditions have been prohibitive to such development. There are no "farmers' children" in the sense in which that phrase is used on the mainland; there is no "country life" equivalent to that of "the States."

The white people have, in general, favored the education of the lower classes along industrial lines, for several reasons—to furnish indigenous skilled labor for the various trades, thus making them independent of the more expensive coast supply; and because of a prevalent attitude that the American public-school education was not suited for, in fact might be considered "too good" for, the children of the lower classes.

Principal Edgar Wood, of the Territorial Normal and Training School, is strongly urging the adoption of the following system of industrial education, with which school-garden enterprises will be closely articulated:

There is at the present time considerable agitation thruout the United States, in fact in most countries where the development depends upon the agricultural resources and the related industries, toward the establishment of continuation schools of the industrial type. This agitation seems to be in a general way taking hold of Hawaii. Many of our leading citizens have expressed their belief that such schools would be applicable to our conditions, and would prove of great benefit in training boys and girls, who have passed the compulsory school age, into productive workers of the community. It is believed that these schools would tend greatly to reduce the number of boys and girls now in our reformatory schools. . . . .

A plan is proposed which in brief asks for the establishment, on each of the four islands, Kauai, Oahu, Maui, and Hawaii, of schools contiguous to important centers of industry, these schools to give instruction in agriculture, home economics, trade, and industries. This instruction to be given in field, garden, kitchen, and shops, and to be of such a practical nature as to enable the pupils at the end of the course to take up work in connection with the respective industries at remunerative wages.

The type school for such a system is as follows: A school shall be established in a given locality when twenty-five students can be assured. The attendance of all boys and girls between the ages of fourteen and eighteen, both inclusive, who are not otherwise wisely and profitably employed, shall be required. It shall be incumbent upon all parents, guardians, and others having the responsibility and care of children of all ages, to send them to the school established in the locality if they are within four miles, or farther if suitable transportation is provided. Others may attend at the discretion of the Department of Public Instruction, e.g., men who may wish to improve as workers.

The equipment of the school shall consist of a farm of not less than twenty-five acres, to be increased in proportion to the number of boys attending by two and one-half acres per boy, and to be equipped with essential hand-tools. Shops equipped to meet the needs of the industries of the environment. Residence buildings provided with sanitary and culinary equipment for properly housing and feeding the pupils.

Students shall be remunerated for their work in accordance with current value, to be determined by some schedule such as time, profit-sharing, or piecework. Students shall work the first two years on the farm or in the shops of the school, and the last two years one-half of each day in the fields or shops of the industry of the locality. The rest of the day will be devoted to the study of related academic subjects—mathematics, geography, or industry, reading and writing.

The Department of Public Instruction will engage and pay all instructors. The industry will supply lands, buildings, and equipment, and pay the students working for them in fields, shops, etc. The school shall cultivate the land set apart by the industry and pay the pupils out of the proceeds of the crop.—*From Report of Superintendent of Public Instruction, 1910.*

The majority of the country schools are on areas of land sufficiently large to permit the development of school gardens. Such gardens are

encouraged by the Department of Public Instruction, and in many cases the teachers themselves are, by training, proficient gardeners. It is noteworthy that of the total 501 public-school teachers, 225 are Hawaiians or part-Hawaiians; 41 Portuguese; and 18 Orientals.

In general the school gardens of Hawaii differ markedly from those of the mainland, in that they are not divided into individual plots, but are common property, the individual pupils not having specific areas. This is doubtless due to several factors—the overcrowded condition of many rural schools, making individual assignments impracticable, and to the fact that many of our most important and interesting crops are long-season plants. Indeed many of the mainland annuals are perennial or nearly so—here, for example, cabbage, parsley, egg-plant, peppers, tomatoes, etc. Moreover, the school gardens of Hawaii are rural rather than urban, and there is lacking that brisk demand for garden plots that characterizes our city populace.

The School Fund Commission, in its recent report, makes the following statement regarding agricultural work in the public schools:

> Nine thousand three hundred and nine pupils engaged in gardening. Practically, all children doing some yard work. More than 125 schools actively engaged in agricultural work. Two schools planting sugar-cane on commercial basis. Work consists of: clearing and preparing land; keeping grounds in order; vegetable-gardening; flower-gardening; tree-planting. The plants most commonly raised are: taro, potatoes, tomatoes; pineapple, cabbage, carrots, parsley, egg-plant, lettuce, corn, onions, string beans, beets, cucumbers, melons, turnips, sisal, various flowers. The trees and ornamentals most commonly planted are: silver oak, monkey-pod, bougainvillea, algaroba, pride of India, pepper-tree, orange, avocado, banana, poinciana, palms of various species, iron-wood, eucalyptus, camphor, lemon, lime, mango, papaia.

Prizes have been effectively used as a stimulus to agricultural work in the public schools. Mr. C. E. Copeland, of Wailuku, Maui, says that

> In 1907 the *Evening Bulletin* offered five prizes of twenty-five dollars each. Some twenty-five schools entered the contest, the pupils reporting weekly, under the following heads: the work done; condition of soil; name of crop grown; methods of cultivation, watering, weeding, etc.; amount of growth made; extermination of pests, and general remarks. At the close of the season a tabulated statement of work done and results obtained was rendered. The vegetables grown were selected from the following list; lettuce, onions, cabbage, beets, tomatoes, beans, egg-plant, carrots, cucumbers, turnips, melons, sweet potatoes, parsley, Japanese cabbage, and peppers. Official committees awarded the prizes at the various exhibits. The competition was very satisfactory to all concerned, and demonstrated that in many, if not all, of our schools, vegetable-gardening can successfully be done.
>
> All of our pupils have abundant opportunity for outdoor work and play all the year round. Practically all have space and means at home to grow flowers and plants. Practically all take advantage of these opportunities. The fondness of the Hawaiians for trees and flowers is well known; the Portugese are mostly agriculturalists and gardeners; and many of the Japanese are expert horticulturalists. Thus it happens that the most of our pupils are already familiar with the growth of vegetables, flowers, and trees. The teachers' chief work in agriculture is to guide the pupils in the application of knowledge already possessed; to encourage their natural fondness for plant life; to develop in

them a desire to own and cultivate the land; to form habits of thrift and industry, and to make the school premises models of neatness, order, and sympathy upon which they may pattern their own dooryards.

In addition to this gardening work of the elementary grades, agricultural work of a more advanced nature is carried on regularly in the industrial schools. The Lahainaluna School reports systematic classroom studies of soils and fertilizers; the various economic plants, their culture and uses; care of farm animals; and studies in economic entomology. The students supply the commissariat with a variety of vegetables and fruits. In addition to the smaller gardens there are large plantings of sorghum, sisal, pineapples, and upland taro.

The Boys' Reform School reports the following plantings since May, 1910: taro, 13 acres; bananas, 2; sweet potatoes, 8; squash, 3.5; other vegetables, 2; alfalfa, 2; other grasses, 3; sorghum and corn, 1; cotton, 1; sugar cane, 30. The methods employed are those of a modern diversified farm, the boys doing the work under competent instruction.

The Farm Department of the Hilo Boarding School is well organized, with an agricultural-college graduate at its head. Thirty acres of land are under cultivation. The farm contributes nearly half of the upkeep of the dining-hall. The main crops are taro, bananas, pineapples, broom corn, cowpeas, vegetables, fruits, and fodder. The Federal Experiment Station has just established a substation on land adjoining the school farm, and the work on this station is to be done by the school.

The Territorial Normal and Training School, at Honolulu, gives a large place to nature-study, elementary agriculture, and school gardening. A portion of the school land is laid off into gardens, and here the cadets are given practical instruction in the raising of crops. They are also instructed in the supervision of garden work, pupils from the grades carrying on work under their direction. The crops are used by the Domestic Science Department in the preparation of the noon lunches, which are sold at cost price to the pupils and teachers. In the kitchen the cadet is thoroly trained in the best methods of cooking and serving the products of her labor in the garden. The kitchen is on a self-supporting basis. Some typical lunches, illustrating the use of garden-products, are as follows:

1. Tomato soup; mince pie.
2. Meat stew; papaia sherbet; buttercup cake.
3. Vegetable salad; creamy rice pudding.
4. Corn chowder; strawberry ice-cream; cake.

In the classroom, the cadets are given subject-matter and methods of teaching the important plants and animals, and similar subjects comprising elementary agriculture. The plants include such types as banana, cotton, coffee, guava, papaia, rice, sugar cane, sisal, taro. The industrial phases of crop-production are emphasized, the studies including all of the stages from the selection and preparation of the land to the final transportation and marketing of the crop.

Teachers who are interested in school-garden work can avail themselves of assistance from a number of sources. The College of Hawaii offers several correspondence courses in this field, in soils and crops, plant life, and practical horticulture. The Normal School, in 1910, issued a *Synopsis of Nature-Study Work for the Elementary Schools of Hawaii*, of 150 pages. The publications of the Federal Experiment Station contain much practical information and are widely used. The Department of Public Instruction issues a monthly, *Hawaii's Young People*, a portion of which covers nature-study subjects. The Territorial Bureau of Agriculture and Forestry furnishes seedling trees, vegetable seeds, and similar material gratis to teachers.

The school gardens of Hawaii are a part of the "forward movement" in education. They are supplanting the mediæval bookishness of former days. They stand for the beauty and dignity of real things. They are simple. They are within the child's realm. Their pleasant influences reach into his heart thru the happy labor of his hands. They typify fundamental institutions.

The school garden has a broad outlook toward life. It is optimistic. It is bound to survive.

POTENTIALITY OF THE SCHOOL GARDEN

CYRIL A. STEBBINS, DEPARTMENT OF AGRICULTURAL EDUCATION, UNIVERSITY OF CALIFORNIA, BERKELEY, CAL.

The theory of evolution, or the theory of a driving force for good, makes one optimistic.

Here I have a poppy, perfect in flower in order that cross pollination may take place thru insect visits, thus to insure perpetuation of the species; perfect in stem that the blossom and, later, the seed may be lifted high in the air for cross pollination and wide dispersal of the seed, again insuring perpetuation of the species; perfect in leaves and in root that the air and soil food may best be utilized. Thus for hundreds of years the force of evolution, or some mysterious driving power, has been at work perfecting this plant in order that it might live.

For ages the sun has offered its light and heat; the earth has been in preparation for thousands of years; the ocean has ever sent its water to stimulate the endless chain of embryonic tissue which binds this plant with all the generations of plants that have gone before. All have assisted as agencies thru which this driving power has expressed itself in this plant. Just as this driving force has been at work in this plant so it is at work in all plant life.

This is a mole, with which you are all familiar. Again we find a perfect organism; life best fitted for its surroundings. The front feet are particularly fitted for digging, the outer covering is smooth, the head is flattened, the snout sharp and prolonged: all are adapted to the

underground life of the animal. Thus we find the driving force at work in this animal, perfecting it in order that it might live. The evolutionary force has not only been at work in this animal, but is at work in all animal life, including man. In man, however, we find higher evolution, the evolution of the ideal. The slow push of the driving power forced all animal life to a certain plane, then came the evolution of the ideal in man to pull him away and above the other animals. The concrete, partially "realizable ideal" is an essential factor in the development of mankind.

Thus in all life, in individuals and in groups, this driving power exists in a greater or less extent. In man it is as evident as tho visible to the naked eye. It lies in reservoirs. "The Rosary," "The Messiah," "El Capitan," Niagara Falls, may tap them. One's whole being quivers; there is an intense desire to do something. This is inspiration, and inspiration is the awakening of the soul-power within, the driving power for good. If the responsibility for the perpetuation of the species rested upon a weakling poppy, mole, or man, the species would fail to exist. It is only the individual that has been able to enhance and express this driving power that has helped the species to live. Therefore, it is the responsibility of each one of us to nurture and to make of ourselves media or agencies for the expression of this force. The unselfish far-seeing man who lives for service to his neighbor, who gives more than he takes; the mother who rears a child for service to the world, are making agencies of themselves for this driving power.

Nature is the greatest exponent of this driving power. It will express itself in the future thru the doctor in preventing abnormalities, rather than in curing them; thru the lawyer it will moralize politics; thru the preacher, the teacher, and the parent it will help to form character. Therefore, I say, believing in this evolutionary power for good, one can only be optimistic. No matter the sharpened eyes for the immorality of a city, no matter the evident weaknesses of an individual, there is within each a driving force for betterment which cannot be denied eventually. No doubt at times it seems to us that this power needs a Washington, a Lincoln, a Roosevelt, to quicken it, for Nature works so slowly for us who have such a short stay to observe her. We grow weary and narrow as Nature's moving picture passes so slowly before us for the film is ages and ages in length.

There was a time when I was ashamed to be introduced as a teacher, but now, like Roosevelt, I am glad of my job, for there is no one with so much opportunity to enhance this driving force as a teacher.

Our first and largest aim for the school garden, then, is to build a whole man to enhance this driving power for good; secondly, to create a sentiment for farming, for country life; and lastly, to readjust the school work—to link school and community life—to give new direction to the old subjects in the curriculum.

Man and his environment are comparable to the ear drum and sound. Without the drum there is no sound. Without sound "waves" there is no drum functioning as such. Man is such a tense drum ever reacting to the vibrations and sensations that reach him with the mind as the refining influence. He is entirely dependent upon his environment. Without the stimuli from without, man would not exist. From an environment normally friendly to his needs, man at birth is thrown into another partly friendly, partly hostile, and indifferent to his wants. He may mark his environment as he in turn is marked by it. The narrower the surroundings the more positive the surroundings, the more a man's habits take the impress of them. We are all of us largely copies of our environment and are continually under its suggestions.

History tells of two Abes—Abe Ruef and Abe Lincoln. They are only alike in first name, and in being absolutely different. How can we account for the one so negative in the driving power for good and the other so positive? Abe Ruef was a city-bred youth. He saw and heard nothing that was natural aside from his neighbors. Nearly everything that confronted him from morning until night was artificial. He continually met allurements and pleasures which bid for his attention. There was something in the superficial life of the city which this man could not deny. An environment of sky-scrapers, of pavements, of lights, of music, of hurry, does not tend to build character. On the other hand, Lincoln lived close to the soil and obtained therefrom vitality, courage, stamina, and all the qualities which made for vigorous manhood. He saw each day paintings beyond the brush of a Raphael, miracles beyond the art of the magician of the lamp, heard music beyond the throat of a Patti. He came in touch each day with the work of the Creator. Here he absorbed the urging of the driving power for good and enhanced it in himself. An environment of mountains and trees, of soil and growing things, of birds and other animals is conducive to character building.

Dr. Prince and Boris Sidis have proved that man is a synthesis of many personalities. His normal personality may be disintegrated into the religious, the economic, the social, the educational, and the æsthetic. With any one of these complexes functioning excessively, there is mental disease. The school garden is potential in building these several complexes to make a well-balanced man, a whole man.

Too often science leads the superficial student away from the spiritual uplift and makes him antagonistic to the driving force which is within him, and which is forcing the world to higher things. A real student of nature must feel this force. He cannot fail to have faith. The sun has risen each morning for ages, for ages man has faith that tomorrow it will rise again. The potential acorn ever fulfills its promise of an oak. The robin's egg ever satisfies the longing of the mother's being. Thus, to all loyal to Nature, she writes faith. Each astonishing act of the plants,

each humanistic thing that is done by the animals, the wonderful changes in life histories, the faithfulness and justice in Nature's activities, touch the souls of the children as if by the finger of the Great Teacher. Froebel said "Nature is the garment of the invisible God."

Whatever constitutes the common measure of the life and work of man, to that the world kneels. Apparently for the present generation, money is that common measure, hence the economic side of the child's nature must receive careful, sane development. While there are many things out of the reach of money, there is nothing quite so fundamental to daily living. In the city of New York a great clock directs the activities of millions of people, so does money influence and direct our living. We rise from our beds at the call of the alarm clock. The morning bath directs our attention to the costly plumbing. Our clothes and the breakfast table jingle with money. The cars on which we ride to the schoolroom speak in terms of dollars and cents. In fact, on every hand there is the pull of money. Stop the work of money and the work of the world stops. With money man has pierced the bowels of the earth, bringing up sparkling streams of water; he has led his railroads over rivers and thru valleys and mountains; with money he has used the wind to pump his water, has harnessed the waters to run his mill; with money he has ever carried on the fight against harmful animals and plants. The economic complex should receive serious consideration. The proper handling of soil and seeds, the control of insect pests, the prevention of fungus diseases; all culminate in the perfect fruit, a representation of man's energy both mental and physical, standing for dollars and cents.

The school garden offers opportunities for forming a correct social personality early in life. A score of individual gardens, community gardens, public paths, public tools, public water, and many other factors, both private and public, make a social life none the less complex and difficult than that of a city. Early in their garden life the children learn to respect those things that belong to their neighbors; to realize that community property belongs to the whole, not to a part, but that each must offer his support; to understand that the policy which is the best for the majority must be supported; to see justice in ten of a class insisting that the eleventh remove objectionable weeds from his garden; to feel, in general, that each represents but one small part of a great whole and that each must do his best to fit in smoothly and laugh with the world rather than to be shoved aside to cry alone.

Our lives are colored or colorless according to the mental pictures conserved. If the ideal is built from the best things in one's environment, one will be led into success and happiness; if, on the other hand, the ideal is formed from pictures which reflect sordidness, filth, and distress, one will be led into failure and unhappiness. The mind is never at rest, it is following a destructive architectural plan or a constructive one. Thru the

gardens, the children should be led to the fountain of the æsthetic sense-nature. In bringing the children in contact with nature, the daintiness of the flowers, the strength of the oaks, the joy of the lark's song, the brilliancy of the butterfly's cloak fill their beings and prepare them for the inspiration of the great trees and the lofty mountains. The splendid coloring of the autumn leaves, the rainbow wings of the birds, the general color arrangement of flowers and trees flow into the subjective sense and, some day, will make themselves manifest, for "to see and to know the beautiful is to desire to create the beautiful."

Educationally the garden is a potent factor, for it not only educates, but educates sanely, by taking into consideration the satisfaction of the racial body and the racial mind of the child. The diagram aims to show that a school garden may be made a little world in itself patterned after the universe. It may be made an embryo community. The children may be brought naturally in contact with those factors which they will meet later in life. Insects may be studied as they affect the garden products. Thus the garden becomes a unifying element and the child is impressed with the wholeness of life. Thru the garden, the child may repeat the civic evolution of his race; thru primitive farming, the market, the bank, and the factory. He may be brought in contact with the world forces: for example, flax may be grown, later the fiber may be separated and used in weaving. It is but a short step from this process to a study of the world's work in clothing its people. Any system of education which does not consider the evolution of the child is not sane. The first business of a child is to grow. Let us grow vegetables, flowers, and children in our school and home gardens. Thus the garden is potential in building a whole man. The city tends to one-sided development. It builds an overbalanced economic complex which leads a man to live in terms of dollars and cents as did Ruef.

The garden is potential in joy. Not long ago, two parents stopped me and spoke enthusiastically of their little girl of seven years. Her campus garden had so stirred her heart that its momentum was carried into the home. Now each evening finds the mother, the father, and the little girl working side by side in the back-yard soil.

From the viewpoint of pleasure alone the school garden has its reason for being. If red cheeks, abounding joy, and interest are indicative, the garden work is worth while as a pleasure-giver. Many a tired housewife has drawn from her little back-yard garden comfort and rest and has been rejuvenated thereby. The soil and plant life are very suggestive of vitality, courage, and peace. But there are too few home gardens and too many tin cans in the back yard. Shall we not inoculate the boys and girls with the garden spirit which makes for vigorous manhood and womanhood and which is so potential in joy?

The second great aim of the garden work is to create a sentiment for farming, for country life.

The school garden results in the home garden. No doubt many boys need saving but shall we forget the girls? Very much of the responsibility for the betterment of this world lies in the potentiality of woman. Apparently she is losing sight of the simple life. We want our girls to drink in the garden air and sunshine, we want them to dig in the soil, to grow plants and to get their hands and faces dirty; we want them to learn to do things for themselves, to be home-builders. There is little use for the excessive hobble skirt, the silk stockings, and the many frills in the garden.

Just as is the citizenship of the individual, so is the citizenship of the state. Not long ago, the writer had occasion to visit two small sawmills. The engines in both mills were of similar horse-power. The one had a small balance and driving pulley. During the cut the engine puffed and pounded. With release from the cut it almost ran away. The other, with a large, heavy balance and flywheel, took the cut with little trouble and with release ran steadily. With individuals in sympathy with farmers and farming, the farm will act as the balance wheel of the state, giving steadiness and power. We care more to get the majority in sympathy with country life than to send a few directly to the farm. We cannot hope to make many farmers of our grammar-school boys, but we can make the future doctor, lawyer, legislator, sympathetic with the needs of the farm. At the present time, we need a law to put agriculture in its largest phase on an elective basis in the schools, and once elected, to act as a substitute for some other subject in the curriculum, not as an added subject. Thus, a dozen legislators sympathetic with educational and farming conditions can be more potential than a hundred farmers.

Our third large aim of agriculture in the elementary school—and the writer is most interested in the elementary school, for just as is the citizenship of the boy in the home and in the school, so will it be in the city and the state—is that of readjustment of the school system, is that of linking school and community life, is that of giving new direction to the old subjects.

There is a great deal of adverse criticism on the present school system. Adverse criticism should not rest so much on the subjects in the curriculum and the school system as on their direction—they face away from community life. Thru the school garden, arithmetic, geography, history, bookkeeping, art, manual training, and the other subjects may be given new direction and new meaning to the children.

ARITHMETIC AS IT IS

1. After a discount of 5 and 10 per cent off for cash, $95.00 are left, what was the original price?

ARITHMETIC WITH NEW AND VITAL DIRECTION

1. If lettuce sells 3 heads for five cents, and the heads are grown four inches apart; how much can I make off of one row of lettuce, if the plot is 10 feet long?

2. If the garden plot is 20×60 feet, how many individual gardens 4×5 feet can be laid out leaving a two-foot path on the four sides of each plot?

GEOGRAPHY AS IT IS

"*New Hampshire.*—Because of its beautiful scenery, New Hampshire has been called the Switzerland of America. The forests and the granite quarries give rise to important industries. The state ranks third in the manufacture of boots and shoes. Cotton manufacture is centered chiefly at Manchester and Nashua, which are located at the falls on the Merrimac. Concord, the capital, also has cloth mills, wagon and carriage factories, and granite quarries. The fine water-power of Dover is utilized by large cotton- and woolen-mills."

GEOGRAPHY WITH NEW DIRECTION

Examine the activities of the community. If it grows fruits, start a nursery in the gardens. If it is a manufacturing district, start economic plants, sugar beets, flax, etc. Harvest these for sugar and fiber, visit the community factories and thus study geography which is vital to the life of the children.

ART AS IT IS IN MANY SCHOOLS

Drawing and painting artificial types foreign to the lives of the children.

ART AS IT MAY BE

Drawing and painting vegetables and flowers which the children have grown and which are *theirs*.

MANUAL TRAINING AS IT IS IN MANY SCHOOLS

The making of a penholder, a bookrack, in which the boy has little interest.

MANUAL TRAINING WITH NEW DIRECTION

With new direction, manual training may be the mending of a tool, the preparation of the stakes for the garden, the making of apparatus for which the boy feels the need.[1]

In a California school, this linking of school and community life, this thought of correlation was given a successful trial. The supervisors of art, arithmetic, elementary agriculture, etc., met in regular conferences. One illustration will suffice to index the results of these meetings. The supervisors of art and agricultural nature-study drew up weekly outlines in such a manner that as the third grade was studying the jay's activities, in art it would color the same bird. Thus art studies were aimed at factors found in the child's environment.

Thus the garden is potential in leading the child to those elements which make for his community life. Æsthetically, socially, educationally, economically, and religiously, he receives sane development which builds a normal personality with good as the driving power. The garden satisfies the racial body and the racial mind of the child, giving him proper growth and much happiness. It makes him in sympathy with the work of the farmer and, lastly, it teaches him the oneness of his environment and the universe.

[1] The writer does not wish it understood that the arithmetical, the historical, the geographical, etc,. content will be furnished entirely by the garden. It will offer typical problems and activities, and will continually point toward the problems and activities of the world.

REPORT OF COMMITTEE ON COURSES OF STUDY IN AGRICULTURE

E. C. BISHOP, IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS, AMES, IOWA

Lack of expense fund has prevented such investigation by and meetings of the committee as has seemed necessary to secure the results desired in a report on this subject.

Such study of the subject and such investigations as have been possible enable your committee to report definitely on some phases of the subject and to report insight into some other phases which exhibit an open field for further research and conference. No attempt has been made to consider vocational courses in agriculture. The report concerns only courses of agriculture offered in schools maintaining the usual general public-school courses of study.

This report is more a representation of some of the governing influences in the arrangement of courses of study in agriculture than it is of specific courses of study. Your committee has reached some conclusions, but aims to present herewith more of inquiry into the subject than of conclusive statement.

Mechanically constructed courses of study arranged without reference to the principles and methods of teaching involved and the community served are useless machinery. The procedure of a modern corn-husking machine, operated by a man skilled in running a potato-digger, is not liable to result in satisfactory work in a wheat harvest field.

The "how," the "which," and the "who" relations have much to do with the "where," and the "what" in the arrangement of courses of study in agriculture. Courses of study already established cannot be dealt with arbitrarily. To inaugurate successfully a course of study in agriculture, a definite understanding must be had of its purpose and of its relation to other established subjects. Agriculture must "make good" pedagogically before it will be given a cordial hearing by teachers, school administrators, and patrons.

Present needs.—The establishment of right courses of study in agriculture is delayed and obstructed by the following conditions:

1. We need a readjustment of elementary science teaching and courses of study in science.

2. We need an organized correlation of agricultural topics with other branches of study.

3. The other sciences cannot give complete treatment of agriculture; we need a separate place in the course of study for such overflow collateral work in agriculture as does not find satisfactory correlation with other subjects in the program of studies.

4. Pedagogy needs to recognize some new values which are concerned especially in the teaching of agriculture. Such recognition will be worth as much to pedagogy as to agriculture.

Some general inquiries.—A few inquiries of a general nature have commanded the attention of the committee. Some of these we have endeavored to answer in full or in part. They are here submitted for the suggestions they may carry:

1. Shall the topic method be used, and if so, with what limitations?
2. Shall a text be placed in the hands of the pupils?
3. Shall leading topics be followed in order and extent according to local importance and other topics be carried in their relation to these?
4. How far may topics, to advantage, be made seasonal and at the same time sequential and be correlated with other work?
5. To what extent shall the selection of units of agricultural interest depend upon geographic control and local interest?
6. In what order shall the economic, cultural, and local interest phases of each topic be presented?
7. To what extent should agricultural topics be taken from their present places under other subjects as now taught and be organized and taught under agriculture as a separate subject?
8. In an agricultural community, should the course of study be formed around agriculture as a basic interest, or should agriculture be merely attached to the general course of study?

Some present-day principles in education.—The teaching of agriculture rests upon the recognized foundational principles of education which have guided the shaping of pedagogic procedure in the organization of every other branch of learning which has become a recognized part of the public-school curriculum. It also applies to some of the more recently developed methods used in good teaching in other subjects. The whole idea of teaching agriculture is no more than the application of what has already been recognized in some other fields of pedagogy.

The following statements should be kept in mind in formulating courses of study and in teaching agriculture:

1. The whole child should be trained.
2. All education should include ideals of social efficiency.
3. All school as well as all home work should be motivized.
4. Applied education vitalizes all school work and all home interests.
5. Strength comes thru doing something recognized by the doer as worth while.
6. Live personal interest in the subject taught is necessary for effective teaching.
7. The child must be taught in terms of his own life at the time he is being taught.
8. Education which trains the child to live best in the present provides the best foundation for further education.
9. The child should be taught to think in terms of action, application, and accomplishment.
10. Education which omits home and community relationships has a defective foundation and a weakened superstructure.
11. Each life is made of real problems. The child's education should help him to solve his own present problems before he is burdened with artificial problems.
12. Education which dignifies honest labor, which sends the individual to his task with personal interest and joyful attitude, and which idealizes the home and all its duties and relationships—such is always good education.

13. Practical education in its proper application provides a high degree of culture with skill, efficiency, and character-training added. It fits the individual for all the duties of life.

14. Industrial education as a cultural and as a practical (not vocational) training, including agriculture, home economics, and manual training, provides general education necessary to the best development of citizenship for this country.

15. As a general subject of scientific or economic study, agriculture properly taught makes better citizens socially, morally, intellectually, and economically.

Principles to be observed in the formation of courses of study and in the teaching of agriculture.—

1. Agriculture is a cultural as well as an economic subject.

2. Agriculture, as a vocation, is a home-making as well as a business pursuit.

3. Agriculture teaching, so far as possible, should be seasonal in its presentation.

4. Agriculture teaching should vitally connect the knowledge of the child with some of his life-interests.

5. The teaching of agriculture should be scientific in its nature, economic in its application, and cultural in its aim and effect.

6. Agriculture is also informal in its nature and should be taught in an informal way.

7. Agriculture teaching should be definite in its purpose; definite in its method; and definite in its results.

8. Agriculture teaching must have enough of science teaching in it to make it worth while to students, as students; it must have enough of the practical in it to make a test of its experiments on a farm produce better results than are being secured in the locality in an unscientific manner; and it should have enough of the æsthetic in it to make it valuable as cultural training.

Some governing principles in the class recitation in agriculture.—

1. Always conduct the lesson when possible in the presence of the living or real object.

2. So far as possible each pupil should have in hand a specimen of the thing studied.

3. Approach structure from the viewpoint of function.

4. Introduce new subjects when and where they touch the life of the child most.

5. Remember that you are teaching the child, not the subject.

6. Tell the pupil absolutely nothing which he can find out for himself by a reasonable expense of time and effort.

7. See that every pupil is actively employed during the entire class period.

8. Make all questions definite; avoid so far as possible questions which may be answered by "yes" or "no."

9. Thru inquiry directed to individual pupils, establish facts as to local conditions, practices, and results.

10. Review principles as often as necessary to keep them clearly established.

11. Keep the pupils reasonably close to the main line of thought. Make note of side lines for later development.

12. Establish the economic phase of the work as often as possible when pupils or parents will appreciate its application.

13. Settle disputed points by experiment and observation—the only scientific way to settle them. Keep the living or real plant or animal in the schoolroom or apartments if possible for continuous observation until study of the particular subject has been discontinued.

14. Conduct the recitation and assign investigations which will lead the pupil to voluntary action in the home.

15. Establish principles—not mere memories or detailed facts. Close the lesson with a problem within the comprehension of the class to be solved by them before the time of the next lesson.

Place in the course of study.—Any purely agricultural theme has phases which have educational value for every grade of public-school work. The child's mind and body rather than materials should be the directing factors in determining courses of study. Agriculture is strong in environmental influences. The pure sciences must reach out into agricultural applications if the child, not the subject, is to have first place in teaching.

The pupil should see purpose in all work and should make some application of what he learns at the time he is learning. This principle applies in the teaching of agriculture thru the entire course of study, beginning with the nature-study work of the primary grades, continuing the same with home and industrial geography thru the intermediate grades, and elemental economic agriculture in the grammar grades, and ending in scientific and economic agriculture in the high school.

IN THE ELEMENTARY GRADES

Some phases of agriculture teaching apply especially to the elementary schools. With respect to the teaching of agriculture in the elementary schools, the committee believe:

1. That (for the reason that there seem to be portions of the subject adapted to children of all school ages) agriculture should be taught in all grades of the elementary schools.

2. That the agriculture work given in the primary and intermediate (1–6) should be of a different character from that given in the advanced grades (7–8); that in the primary and intermediate grades, emphasis should be laid more on a study of things than of processes, while in the advanced grades, the study of processes should receive a greater prominence.

3. That the aim in grades 1–6 should be largely cultural and that in grades 7–8 the aim should be the practical rather than the cultural alone.

4. That there should not be more than two classes at the same time in the subject in the ordinary one-teacher school of eight grades.

5. That in the earlier grades (1–6) agriculture be taught largely as practical nature-study and correlated as closely as possible with home and industrial geography while at the same time taught as a separate subject from geography, especially after the third grade.

6. That elemental agriculture should run thru the seventh and eighth grades and that here the subject should be approached from the viewpoint of its economic value to the family, the community, and the country.

7. That comparatively few topics, one at a time, be attempted each year and that these be taught intensively, rather than a large number of topics taught superficially.

8. That no class exercise should be for a shorter period than 20 minutes and that the total time of recitation work per week should not be less than one hour.

9. That the materials to be studied ought, in general, to be those which figure prominently in the life of the community in which the school is located, and that, where possible, the work given in agriculture should be based upon the things found and the operations carried on in the school garden and in the homes of the pupils.

10. That the method to be followed in presenting the formal classwork should be that

known as the developed method, and that the laboratory and fieldwork should take the form of problems to be solved by observation or experimentation.

11. That a minimum course should be put into the hands of teachers of the one-teacher rural elementary schools for the following reasons:

First, a glance thru a complete course of study in this subject tends strongly to discourage the great majority of teachers who are yet unacquainted with the materials of the subject and with the literature bearing upon these materials; such, for instance, as the experiment station bulletins. Any complete course would contain a great many topics of which the teacher is either entirely ignorant or with which she is only remotely acquainted. Also, the literature bearing on these topics is so scattered that it can be brought together only with considerable difficulty and expense of time and effort, and even when collected is very difficult to organize because fragmentary or technical, or both. Second, the general results to the pupil in interest aroused and strength acquired from a comparatively few topics studied somewhat intensively will be found far superior to these results when a greater number of topics are studied but more superficially. Third, the teacher can adapt such a course more easily to the needs of the particular locality. Fourth, there is less likelihood of unnecessary time being spent on relatively unimportant topics. Fifth, a minimum course will consume all the time which can be found at present in the crowded curriculum of the rural school, and the course can be expanded as this condition changes in response to the demand for more time.

12. That the minimum suggestive course should be applicable to local agricultural conditions, and should be a definite, practical working course in agriculture as a separate subject, tho closely related to other school subjects.

13. That the course in agriculture should contain suggestive correlative work with each of the other subjects taught wherever such correlation will intensify, vitalize, and utilize the work in such other subjects to the advantage of the child's interests.

14. That a number of lines of work accessory to the work in agriculture proper should be suggested for the use of the teacher to further stimulate interest in the work; such work to be largely observational and experimental and to relate closely to the home and community interests.

15. That it is very desirable to have the work under each topic divided into lesson units, each outlined as to material, aims, method of procedure, and citation of literature.

Place in course of study as related to nature-study and geography.—

NATURE-STUDY

Grades 1–6.

a) Informational. Relationships. Ethics.

GEOGRAPHY

a) Grades 1–3.
Informal teaching of nature-study units in home geography and oral geography.

b) Grades 4–7.
1. Practical nature-study of geographic units in home and industrial geography.
2. Type studies of geography units.
3. Comparative agricultural relationships.
4. General geography.

AGRICULTURE

a) Grades 1–3.
Informal nature-study. Home geography.

b) Grades 4–5 (or 4–6) (taught as separate subject).
Practical nature-study teaching of agricultural units, and of home and industrial geography units of agricultural education.

c) Grades 7–8 (or 6–8).
Elemental, economic agriculture.

PURPOSES

a) Nature-study.
1. Proper æsthetic development of child.
2. Development of reasoning faculties.
3. Gathering material for future use and enjoyment.
4. Accumulating experiences for use in present and future judgments and choices.

b) Geography.
1. 1, 2, 3, and 4 of nature-study.
2. Knowledge of relationships.
3. Interpretation of unseen thru seen world.

c) Agriculture.
1. 1, 2, 3, and 4 of nature-study.
2. 2 of geography.
3. To know agricultural processes. Gaining knowledge of the why, how, and when of agricultural operations in order to increase profit and pleasure.
4. Improvement of individual, family, school, and society.

General method of work.—In the elementary schools, especially in a farm community, the relation of school and home work is very close in education in agriculture. Agriculture is plainly not a book subject. It is a subject of the home, the field, the garden, the meadow, the stream, the roads; of domestic animals, household interests, and other home relations. The relation of school and home work in teaching agriculture may be represented by the following enumeration of parallel activities:

AT SCHOOL	AT HOME
1. Observing	1. Observing
2. Experimenting	2. Experimenting
3. Demonstrating	3. Demonstrating
4. Studying	4. Recording
5. Reporting	5. Working
6. Reciting	6. Conversing
7. Reading	7. Reading

WHERE TO BEGIN IN TOPIC STUDY

Begin with that topic or subject which will enlist the interest of pupils and the co-operation of parents, which can be effectively taught, and the teaching of which will bring desirable activity and results in the community. An outline by A. V. Storm furnished rural teachers in Iowa illustrates this idea. It is in part as follows:

Why study corn first?

1. Most general and valuable crop.
2. Popular among patrons.
3. Much to be learned.
4. Information easily obtainable.
5. Is easily handled in school.
6. Is easily improved.
7. Teacher easily becomes sufficiently proficient.
8. Something for each month.
9. Requires only home- or school-made apparatus.
10. Leads community to act.

What to study about corn.—

1. What is wrong with the corn crop?	September
2. Counting the stand	September
3. Saving and storing seed corn	September and October
4. Judging—studying corn	December and January
5. Testing seed corn	February and March
6. Preparing seed for planter	February and March
7. Preparing planter for seed	February and March
8. Preparing the seed-bed	April, May, and June
9. Cultivating corn	April, May, and June
10. How the corn plant grows	April, May, and June
11. History of the corn plant	Any time during the year after interest in the subject has been aroused
12. Kinds and varieties of corn	
13. Improving the corn crop	
14. Corn arithmetic	
15. Friends of the cornfield	
16. Machinery for the corn crop	
17. What becomes of the corn crop	
18. Corn and the rotation of crops	
19. Weed enemies and how to eradicate them	
20. Insect enemies and how to defeat them	

Topic study.—The foregoing represents a brief general outline for topic study of the various divisions of farm crops, garden and orchard crops, and other similar subjects. Elementary teachers have been more troubled with the study of farm animals. The general outline furnished Iowa rural teachers has been used effectively. The following quotations illustrate:

POULTRY

Divisions: Chickens, Turkeys, Geese, Ducks, Pigeons.
Chickens:

Types: meat, egg, general purpose.

Breeds: Brahma, plymouth rock, wyandotte, orphington, leghorn, etc.

Size, conformation, color, judging, parts, uses, improvements, selection, feeding, care, management, housing, prices, profits, diseases, products: "picking" and dressing, cooking, carving, serving, marketing, care of eggs, incubators, chicks, composition of egg, testing eggs, trapnesting, records, markets, origin, history, distribution, arithmetic of, pictures, essays.

CATTLE

Types: Beef, dairy, dual purpose.

Breeds: Shorthorn, angus, jersey, holstein, red polled, etc.

Size, conformation, quality, parts, correlation, judging, improvement, selection, care, feeding, management, recording, housing, prices, market products, cuts of meat, preparation for food, by-products, packing-houses, testing for butter fat, common diseases, testing for tuberculosis, cleanliness, care of milk, origin, history, distribution, pictures, arithmetic of, essays.

Topic outlines of this character, with the application of such of the following as may be used to advantage, will enable any good teacher to get satisfactory results in agriculture, to vitalize the work of the entire school,

and to arouse the patrons to good thinking and to activity which will uplift the home life, and lead to the betterment of community interests. This is effective teaching of agriculture.

THE HOW OF AGRICULTURE IN ONE-TEACHER RURAL ELEMENTARY SCHOOLS

A summarizing of successful practice in teaching agriculture in the rural school of one teacher and the ordinary governing conditions brings the following suggestions to teachers. All these may not apply in any one school, but many of them may be applied in every school.

1. Study things. Use books and other printed matter as aids only.
2. Remember that your first duty is to teach the child, not the subject.
3. Avoid miscellaneous exercises.
4. Have a regular time and place for work.
5. Have one class in agricultural environmental work; grades 4 and 5 (or 4, 5, and 6) combined.
6. Have one class in elemental, economic agriculture; grades 7 and 8 (or 6, 7, and 8) combined.
7. Alternate with other studies if necessary.
8. Recite two to five times per week, with 15- to 25-minute recitations.
9. Use some time out of school hours, but do not make it burdensome.
10. Use the topic method.
11. Choose one important topic (e.g., corn) and follow it thru the school year, or such time needed to complete the topic study.
12. If desired, carry some other subjects (e.g., weeds, soils, poultry, trees) to fill in or supplement work with principal topic.
13. Have work, so far as possible, seasonal and sequential.
14. Take up each topic when pupils feel the need of it.
15. In upper grades approach the subject from viewpoint of more profitable farming.
16. Correlate with other studies at vitalizing points.
17. Use arithmetic of each topic for arithmetic classwork, if possible, at the time the topic is being studied.
18. Use agriculture material (e.g., reports, facts, experiences, comparisons, investigations, accounts, local items, and other data) for English composition, spelling, geography, booklet work, and in other correlative relations so far as possible when topic is being studied; reserve other parts for later use.
19. Have pupils report on actual farm conditions, practice, and results.
20. Have schoolroom experiments showing fundamental principles.
21. Have schoolroom and school-garden laboratory experiment work.
22. Assign definite home experiments for pupils.
23. Assign definite home observation work for pupils.
24. Call for, and consider in class, reports from Nos. 18, 19, 20, 21, 22, and 23.
25. Discuss farm conditions and practices in class, with view of gaining knowledge of best methods of farm procedure.
26. Have pupils gather and organize statistics from each farm; e.g., size, breed, weight, color, type, value, cost of feeding, etc., of horses, cattle, hogs, sheep, poultry; also acres, yield, variety, quality, value, etc., of all crops on farm.
27. Have pupils bring samples of worst local weeds; name them; tell harm done, how propagated, disseminated, eradicated.

28. Have picture gallery of best animals, plants, buildings, crops, birds, etc.

29. Have rogues' gallery: worst weeds, insects, birds, animals, scrub stock, scrub crops, etc.

30. Have school museum: crops, soils, weeds, insects, etc.

31. In fall, collect and save weeds, weed seed, etc., for future study.

32. Have contests, exhibits, etc., of school work and interests, for district, township, county, and other occasions where people may see results of work.

33. Bring plants, animals, machines, soils, etc., to school for study.

34. Have scales, measures, samples of feeds, etc., in school and work out balanced rations.

35. Make Manila charts of data, tables, etc.

36. Have a set of tools at schoolhouse and teach use by making needed articles for school and home.

37. Put up bird houses at home and school.

38. Raise plants at schoolhouse, but no crops needing vacation attention.

39. Have class visit farms for definite purpose; take notes and make written reports.

40. Have class visit fields and make written and oral reports.

41. Have pupils write many timely reports and essays.

42. Work toward good form, systematic arrangement, and neatness in all written work.

43. Use written work for display at school for information and reference of pupils and visitors.

44. Send best articles to local papers.

45. Have debates on important questions; e.g., "Special vs. dual-purpose cattle."

46. Have special day programs; e.g., corn day, clover day, bird day, milch-cow day, etc.

47. Have successful patrons address the school.

48. Make spraying mixtures; spray crops for patrons.

49. Test seed corn, grass and garden seed for patrons.

50. Test quantity and quality of milk of local cows.

51. Add books, bulletins, papers to school library; classify and label.

52. Use traveling library.

53. Decorate schoolroom appropriately; change occasionally.

54. Landscape school grounds.

55. Take pictures of school, its work and surroundings.

56. Organize club or grange in neighborhood.

57. Develop your own rural knowledge and sympathies.

58. Leave record of work done for successor.

Slightly adapted from aforementioned Iowa outline.

IN THE SECONDARY GRADES

In the ordinary secondary course of study which generally begins with the ninth grade, agriculture may occupy from one to eight semesters of work, according to the local conditions and the possibilities for securing proper equipment and skilled teachers.

The committee has gathered considerable data on secondary courses of study but is able at this time to report only progress. Study of the subject, however, has developed some general problems which appear yet to be very much unsettled.

The following inquiries are placed before you:

1. If taught as a separate subject:
   a) In what year or years?
   b) To what extent? What phases of the subject shall it include?
   c) In what order shall topics be arranged?
   d) Which related subjects shall precede and which follow agriculture?
2. Should agriculture be correlated with other science branches? If so:
   a) Shall we use the established science courses in their present form and adapt agriculture to them?
   b) Shall we rearrange the science subjects in order to best adapt agriculture?
3. Shall agriculture be taught as a required part of each subject in the curriculum with which it is naturally related or as an optional division of such subject?
4. Should texts be placed in the hands of pupils? If so, should a general text be used or should there be several special topic texts?
5. What modifications should be made where the high school does not carry full science courses?

Your committee does not attempt at this time to solve these problems except as indicated in the following conclusions, suggestions, and information:

Use of texts.—If only one or two semesters of simple work are offered, and especially where the teacher has not been well trained, a good general text in the hands of pupils may be used to advantage as a guide with these cautions:

1. Omit such portions in the text as are not pertinent to local agriculture or to the necessary general knowledge.
2. Amplify far beyond the contents of the text in those topics pertinent to local agriculture.
3. Keep in mind that the study of agriculture is primarily a study of things, not printed matter, and that books are merely aids.

Teachers.—The simple courses in which a general text is used could, if necessity required, be taught by one who is not educated in an agricultural college, provided he or she has five qualifications: First, farm experience; second, good training in general science; third, sympathy with the work; fourth, initiative capacity; fifth, teaching ability.

The longer courses using special texts and going more fully into special divisions should be taught by one prepared in an agricultural college.

Equipment.—In all courses in agriculture, large use should be made of a well-selected agriculture library. Laboratory facilities as to room and equipment should be ample for thoro individual work by each pupil, with much material. A large amount of systematic seasonal fieldwork should be done.

Courses of study.—In the present stage of development, it appears that the best plan for reaching effectively the great mass of students in the usual public secondary schools is to have an elementary course in agriculture offered as an elective course or as elective studies, giving along with the work in agriculture the same general training which all students in the same school receive, and placing the course in agriculture on an equality

with the other courses, allowing considerable freedom as to what other studies shall be omitted for the agriculture; requiring, however, considerable work in English, history, and civics as a general preparation for citizenship.

Two-semester courses in agriculture are bringing good results in some of the middle-western states. In 130 accredited high schools maintaining normal training courses for preparing teachers for the rural schools in Nebraska, the following course in agriculture is offered for all students:

TWO-SEMESTER COURSE—NEBRASKA

Synopsis

First Semester	Classwork Number of Periods	Laboratory Work Number of Double Periods
I. Farm Animals	32	8
II. Milk and its products	20	5
III. Soils	12	3
Total	64	16
Second Semester		
I. Soils (*continued*)	12	8
II. Field Crops	18	12
III. Orchard and Garden Crops	18	12
Total	48	32

In 160 accredited high schools in Kansas maintaining courses in normal training for rural teachers, the following two-semester course in agriculture is offered:

TWO-SEMESTER COURSE—KANSAS

Synopsis

A. Introduction.
   1. Definition of agriculture.
   2. Divisions of agriculture.
   3. Forces controlling plant and animal growth.
B. Soils.
C. Propagation of Plants.
D. Farm Crops
E. Orchard and Garden Crops.
F. Enemies of Plants.

Three recitation periods and two laboratory periods per week are recommended.

The outline for classroom instruction is based upon the text, *Elements of Agriculture*, by G. F. Warren, and for laboratory work upon *A Unit in Agriculture*, by Elliff.

A four-year course in agriculture which has demonstrated its value in very effective service is offered in the Albert Lea, Minn., high school. The complete course is as follows:

ALBERT LEA HIGH SCHOOL

Entrance: Eighth Grade

FIRST YEAR	SECOND YEAR
Elementary Algebra	Plane Geometry
English	English
Botany	Zoölogy and Physiology
Farm Crops	Animal Husbandry

THIRD YEAR	FOURTH YEAR
Physics	American History and Civil Government
English	English
English History	Chemistry
Farm Mechanics	Soils and Horticulture

Pupils may take manual training, sewing and cooking, music, and freehand drawing.

Another good four-year course is in operation in New York state. The work in agriculture is outlined as follows:

COURSES OF STUDY IN AGRICULTURE FOR HIGH SCHOOLS OF STATE OF NEW YORK

Each Subject, Half-Year—1 Credit

1. Cereals and Forage Crops.
2. Poultry Husbandry.
3. Animal Husbandry.
4. Potato Growing.
5. Fruit Growing.
6. Apple Growing.

Each Subject, Full Year—2 Credits

1. Dairy Husbandry.
2. Mechanical Drawing, Farm Engineering.
3. Optional (2): from Physics (1), Chemistry (1), Biology (2), Farm Work (2).

THE JOHN SWANEY SCHOOL

A high-school course of study which is bringing results in a rural community and one which offers some good ideas on the arrangement of science courses, is that of the John Swaney School in north-central Illinois. This school is in the country, three miles from McNabb, a country station. The school has a campus of twenty-four acres which includes land under cultivation and a tract of open timber with a large variety of trees. The school building is provided with domestic science, natural science, and physical science laboratories and manual-training rooms. The school was opened in January, 1907. It offers the following courses of study:

FIRST SEMESTER	SECOND SEMESTER
First Year	
English I	English I
Algebra	Algebra
Physiology	Physical Geography
Agronomy I or Latin I	Horticulture or Latin I
Household Science or Manual Training	Household Science or Manual Training
Second Year	
English II	English II
Algebra, 10 weeks	Geometry
Geometry, 10 weeks	Botany
Zoölogy	Ancient History, 10 weeks
Ancient History	Animal Husbandry, 10 weeks or Household Science, 10 weeks
Drawing	Music

FIRST SEMESTER	SECOND SEMESTER
Third Year	
English III	English III
Chemistry	Chemistry
Agronomy II or Latin II or Household Science	Animal Husbandry or Latin II or Household Science
English History	English History
Fourth Year	
English IV	English IV
Physics	Physics
Agronomy III or Household Science	Bookkeeping, 10 weeks
American History	Arithmetic, 10 weeks
	Civics

Two semesters of agriculture and two semesters of manual training are required of all the boys, with an option of four semesters of agriculture. The girls are required to take four semesters of some phase of household economics, with an option of two more.

Physiology and physical geography are required in the first year of all students; botany and zoölogy in the second; chemistry in the third, and physics in the fourth; making a total of four years of science required, besides the agriculture and home economics.

The laboratory sciences (all except those of the first year) have three double periods and two recitation periods given them. A good measure of outside laboratory work is done. The classes in agronomy have practice in picking weed seeds and properly labeling them; in sorting out the red clover, alfalfa, and other seeds of the clover group which have been mixed with radish, rape, timothy, grass seeds, etc. The class has exercises in corn judging and testing. The class in horticulture plants trees and does grafting in a near-by orchard.

Evidences of results are indicated by the activity of the pupils in pruning fruit and shade trees at home, in budding and grafting, and in other work relative to home interests.

Illustrating the correlation of agriculture with other science branches and showing how a pure science may be made to minister to an agricultural education—reference is here made to some abstracts of reports taken from the notebooks of several students. These abstracts are condensed accounts of field trips taken by members of the zoölogy class.

ZOÖLOGY REPORTS

1. "Field trip, September 4. Purpose was to catch insects for study. Insects found were grasshoppers, potato bugs, caterpillar, and a spider." "Field trip, September 6. To look for insects on trees. Found tent caterpillars and gall flies." "Field trip, September 9. To watch tent caterpillars work. Also gathered some insects, as worms on elm leaves, pyramidal gall, sour-bug, cox-comb gall, measure worm, cicada, grasshopper, katydid, black bug, butterfly, and spiders." "Field trip, October 7. To look for insects in a cornfield. Found caterpillars, corn stalk borer, green plant lice, ants, corn-root aphis."

2. "Field trip, September 4. On this trip we found three species of the old-fashioned potato bug. It is also known by the name of Spanish fly or blister bug. These bugs were working on potato and raspberry vines and grasses. One species was a plain black bug (*sic*) about three-quarters of an inch long. Another was about the same length, but it was black with a white stripe down the middle of its back and white stripes around its wings. The last one had dark brown stripes running lengthwise on its back."

3. "Field trip, September 13. We then went to a truck patch just across the road from the campus. We examined the stem of the pumpkin and in it found several squash-vine borers. They are very injurious to the plant and often destroy it entirely. They are of a whitish color. One of the passage-ways of the borer was measured and it was found that it had bored over 3 feet, which destroyed the vine. The adult form of the borer is a moth but is not injurious, only that it lays eggs that hatch into one of the great pests of the pumpkin patch." "Field trip, October 7. The zoölogy class went to a corn-field north of the campus and examined some of the cornstalks. In them we found small brownish worms, called the cornstalk borer, which is the larva of a moth. In one stalk, we found punctures in every joint, in the first seven joints from the ground, two or three in every joint. We found another small stalk with no ears on it being worked on by the borer. The class thought that the borer was getting ready for the pupa stage, as they did not seem to be working much. We found some green plant lice on a corn leaf, some with wings. A small stalk of corn that had an ant hill at the base was pulled up by the roots and it was found that all the dirt had been worked away from them. The corn-root aphis were thick on the roots. They were a greenish color. We shook them and some fell off on the ground. The ants began carrying them away immediately."

This is in direct contrast to a prominent eastern school system where, during the last year, the eighth grade began the study of a series of animal types with the amœba.

GUTHRIE COUNTY HIGH SCHOOL—IOWA

An illustration of the idea of introducing the study of agriculture early in the high-school course with that division of the subject which is of greatest interest to the community is offered by the Guthrie County, Iowa, high school. Stock raising is here the principal industry of the county. Local interest centers around animal husbandry and the related subjects of corn growing and animal feeding. For this reason all such work is taught in the earliest year of the agricultural course. This arrangement enables the school to justify the work in the eyes of the patrons and it appeals to the liveliest interest of the pupils.

The work in animal husbandry includes stock raising with score-card practice, visitations to near-by stock farms, and the study of animals from the standpoint of the farmer and professional stock man. In agronomy, the beginning work takes up the study of corn and other grains. Considerable time is given to the securing and judging of seed corn and to making germination tests of samples of seed corn to be used in the spring planting by farmers who send their seed corn to be tested.

This school takes up the subject of farm mechanics. The student devotes considerable time to setting up the various machines and farm implements and to gaining a knowledge of the working principles of farm

machinery. This work provides excellent opportunity for correlating with physics later.

Chemistry and soil physics come in the first semester of the fourth year. The chemistry and composition of soils, plant food, sources of fertility, texture, moisture, with the causes affecting its movement and conservation, and similar topics are discussed and investigated in the laboratories, each student gathering and testing his own samples.

In the spring months of the senior year the students give attention to horticulture, embracing the most important principles of fruit growing, grafting, cross-breeding, and allied questions.

Your committee has been able to hold but one meeting with part attendance only during the year. What has been done has been largely by correspondence. We are indebted to Dr. C. H. Robison, Montclair State Normal School, N.J.; Professors P. G. Holden and A. V. Storm, State College of Agriculture, Ames, Iowa; and Professor E. E. Balcomb, tate Normal School, Greensboro, N.C., for valuable assistance.

The foregoing is submitted as a suggestive opening for discussion, further investigation, and such recommendation as the Department of Rural and Agricultural Education may direct.

E. C. BISHOP, *Chairman*

E. C. BISHOP, Schools Section, Extension Department, State College of Agriculture, Ames, Iowa
B. M. DAVIS, Department of Agricultural Education, Miama University, Oxford, Ohio
C. L. HOWE, Director Agricultural Education, Department of Public Instruction, Albany, N.Y.
RILEY O. JOHNSON, Department of Biology and Agriculture, State Normal School, Chico, Cal.
JOSIAH MAIN, Department of Agricultural Education, Western State Normal School, Hays, Kans.
Committee

AGRICULTURE AND DOMESTIC SCIENCE IN NORMAL SCHOOLS WITH SPECIAL REFERENCE TO PREPARING TEACHERS FOR COMMUNITY WORK

JOHN R. KIRK, PRESIDENT, STATE NORMAL SCHOOL, KIRKSVILLE, MO.

(*Synopsis*)

All efficient instruction by the normal school in agriculture and domestic science tends toward desirable attitudes of mind in the future teacher and the drawing together of the school as if it were itself already a community.

The making of the curriculum becomes the shaping of community thought. Industrial education in the normal school, properly conducted, leads the intending teacher's mind out of the old grooves and traditions. The efficient normal school or teachers' college is itself a community. Its students are characterized by identity of purpose, by a common spirit of

self-help, and by readiness to help others. The right-minded normal-school president and faculty members live largely among the students, including the practice-school children of the various grades. They associate with the students, talking, listening, and enjoying life with all the curious, inquisitive, anxious, unpurposeful younger ones, as well as those of mature years and well-defined ambitions.

The well-equipped normal school of high character has courses in agriculture, farm architecture, machinery, sanitation, art, and household economics. It has vegetable and flower gardens and a farm close by. Prospective teachers spend many hours on the farm studying together the crops, the soil, the testing of seeds, the dairying, the dairy herd, the sheep, the chickens, and all the usual products of the garden and the farm. The faculty and the students of the good normal school live a strenuous and happy life. Their interest never flags. New conditions and new problems daily arise to draw faculty and students together in the common struggle to master the situation in view of future possibilities.

In the efficient, up-to-date normal school the farm work and the garden work are done by the students. Those students not living on the farm and not in immediate daily contact with its necessary labor make frequent trips into the farm and the gardens. The work during these trips constitutes part of the laboratory work of the students. Those students who have never lived on a farm must, of course, depend upon their observations and experiments while students, such observations and experiments being supplemented and regulated by readings. Those who have lived on a farm have already a good basis laid for the more efficient work and study while students.

Classroom reports of the farm observations and experiments are secured thru a sort of parliamentary practice. The most efficient instruction implies that the teacher is somewhat in the place of the chairman of a meeting. The discussions are direct, economical, and animated. No time is wasted; no one gets sleepy or tired. No one indulges in long scientific or theoretical lectures. The teacher takes his turn at opportune times. He guides and directs energy thru good classroom tactics. He never talks when the student is saying or going to say what ought to be said. He even allows students to struggle in the delivery of their ideas and for a moment even to go wrong, in order that he may induce the highest wakefulness in their minds and ultimately produce the clearest possible conceptions. In such a scheme of instruction there is little of mere learning and reciting. There is rather a right direction of student activities. The teacher typifies a leading citizen in a species of community interests, a real democracy of effort.

This give-and-take community struggle in the laboratory, the field, and the classroom produces a sympathetic open-mindedness and a student attitude which will not patiently tolerate verbose or pseudo-scientific lectures.

The fruitage is a teacher who will never indulge in a typical lecturing method perpetrated by many college professors. Such a teacher is an efficient force in a new community, because of having lived a few months in a sort of bona-fide farmer community and having become habituated to farm experiences, experiments, and thoughts. The students become independent thinkers and readers, seeing things with the eyes of a farmer, speaking the farm language, not a dialect, but genuine, clean-cut English easily understood by the farming community.

The farm and the real farmers are the best concrete source from which to draw matter for use in the agriculture class. The road is never too dusty, the sun is never too hot for students of a rightly directed normal school to make a trip into the farm or the garden and always with cheerfulness and lithesome vigor.

One day when the thermometer stood at 90, I saw some forty normal-school students, men and women, leaving a laboratory to visit the middle of the farm a half-mile away. They carried notebooks, pencils, and eyes accustomed to use. Some wore hats; some did not. They were actual teachers, strong of limb, clear of complexion, buoyant of mind. On returning, some of the young women were gathered at a pump refreshing themselves. They were asked whether they were not fagged out. The answer was: "We hadn't thought of it." The further question was: "What would have happened had you made such a journey on such a day five years ago?" The answer was: "A lot of girls would have gone to bed for about two days."

This example shows the student attitude and the mental trend under wholesome management. The call is for idealists who have bone and sinew and will, who have tenacity to do things. Farm preachers are not needed; sentimental teachers who deliver lectures about farming are not needed.

By using the farm and garden as laboratories, the students learn the soil conditions; they understand the growing crops, why planting is done in various ways at various times, how the soil is revitalized. Knowledge so obtained is community knowledge. The normal school becomes a disseminator of information coming from the experiment stations, from practical farmers, and from research laboratories. Instruction that is best for community life is informal. It leads to much of original experiment and observation. It encourages personal initiative and freedom of expression, yet caution as to positive dogmas.

Working on the farm in groups, observing, feeding, and experimenting with nearby herds of domestic animals, reporting to and exchanging views with entire classes—these things accustom young prospective teachers to work almost wholly as a community works. I have seen a half-dozen young men working together an hour a day for two weeks on a simple but much-worn steam-engine before getting it into operation. These students acted,

to all intents and purposes, like so many farmers working around a reaper, or a silo, or a water filter on the lower side of a pond.

Groups of practice-school children are brought before the classes of teachers in agriculture. The children are told to make observations in their homes and to discover and report and discuss in the presence of the teachers the sanitary and insanitary conditions which they discover. Startling revelations are sometimes made. The children and the prospective teachers have an awakening. Thru knowledge they acquire growing discontent with insanitary conditions. They are unlikely ever to live in a community and remain silent and contented where insanitary conditions prevail.

It hardly seems necessary to discuss this natural and wholesome procedure with special reference to preparing teachers for community work. It seems practically impossible to give such courses naturally and efficiently without leading directly and unavoidably into that attitude of mind which will never be content without using the knowledge acquired for the community interest. It is impossible for me to discuss satisfactorily the domestic-science or household-economics phases of this subject, but it seems to me that the whole trend of household economics, like that of agriculture, leads directly and unavoidably into those habits and attitudes of mind which culminate in community work.

DISCUSSION

Riley O. Johnson, State Normal School, Chico. Cal.—The institutions to be found in any community find justification for their existence only in so far as they minister to the needs of that community. Otherwise they are an economic dead loss. The degree of success which any institution attains is properly measured by the contribution which it makes to the needs of the community in which it is placed. This is just as true of the school and even of the church as it is of the grange, the agricultural fair, or the co-operative marketing organization. However beneficent may be the aims of the church, that institution has no moral right to exist in any community where it does not really meet some vital need. And however noble may be the aims of the school, the school has no moral right to exist in any community where it cannot or does not minister in as large a way as possible to a need that is real and vital. At a passing glance it appears strange that we have been so long in recognizing the truth of this proposition. We seem to have come by its recognition now only because this is an age of conservation—an age in which the economic seems about to overshadow everything else. (Let me say here, parenthetically, that however much the latter fact may be deplored by some, the general result is good. The idea of conservation may be applied with as great benefit to the things which are spiritual as to those which are temporal, and conservation always rests upon the economic idea.)

President Kirk has told us that the school curriculum should be based upon the experiences of the children to be taught. This statement is universally conceded from the point of view of the psychologist, because it is a well-recognized fact, to use President Kirk's words, "that instruction should lead from old experiences to new ones." But educationists seem to have overlooked a fact equally important in support of the first statement. The experiences of children are made up in large part of, at least are strongly colored by, the things which vitally concern the welfare, the life, of the community in which they live. Hence leading the children from their old experiences to new ones is a positive

guaranty that the instruction given shall minister directly to the needs of the community in which the children live. And, as from the psychologist's point of view the new experiences are not only interpreted by, but react upon, the apperceptive mass, changing its entire organization, so do the new experiences gained in the school also react upon those of the community, bringing about in time a complete reorganization of the community's life. Basing rural instruction, therefore, upon old-time village experiences or upon anything else than community life, not only renders the new ideas and experiences given by the school less significant to the child, but the reaction of the instruction upon the daily life of the community is lost, and the child is burdened with only so much useless stuff.

From this it follows that unless the school can offer courses in agriculture and domestic science and sanitation—the things which function to the greatest extent in rural districts; that is, unless it ministers in a direct and large way to the needs of the community in which it is placed, it has a right to existence only by sufferance of its patrons and supporters.

President Kirk seems to me to have dwelt largely upon the preparation which the teacher obtains incidentally from having lived for a number of months in an actual community (that afforded by the good up-to-date normal school) and having entered as fully as possible into, and taken part in, its life. He has given us some most excellent ideas concerning the equipment and administration of such a school in order that it shall be an ideal community. The plan whereby the class work (if such it may be called) becomes a democracy of effort, in which the teacher merely figures as a leading citizen, is worthy of general acceptance and imitation. I wish to raise the question, however, whether such preparation is in itself sufficient. It appears to me that the plan would be akin to the preparation offered to teachers by a normal school in which there were no academic classes, and which offered only so much academic instruction as would be obtained in preparing the lessons to be taught in the training-school. Would the preparation be sufficiently broad? Is it possible, from the standpoint of time and in the way indicated, to give to students in a normal school a preparation which will enable them to go into such a large area as normal schools usually serve and do well the various kinds of work that different communities need? Might not the student, with all his ability to carry on the work in the way indicated, lack the preparation necessary to give him the standing of "a leading citizen" in the community? I would submit, as my opinion, in answer to these questions, that the plan outlined by President Kirk is most excellent as far as the method of doing the work is concerned, but that the time for this work at the disposal of students in our normal schools, unless they are going to be specialists, will permit of their covering comparatively very few topics in an agricultural course. It seems to me to call too much for experimentation as a means of finding out how to do things and seems too much like the leading of pupils in science classes to rediscover all the truths of science. The time is short. I would advocate a larger use of the lecture method and demonstrations by the teacher where the facts could not be worked out by the student with a reasonable expense of time and effort.

PHYSICAL EDUCATION IN ELEMENTARY RURAL SCHOOLS

L. R. ALDERMAN, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, SALEM, ORE.

There need be no argument made for physical education, for the conviction that the body is in need of training is as firmly fixed as is the belief in the necessity for training in the intellectual and the moral life. But when one speaks of physical education for the rural schools, he is met with a questioning and indulgent smile, just as if the rural schools were never included when we speak of education. Music, drawing, and close supervision are

essential for the town and the city, but they are not needed in the country. The country children draw pictures on the barn doors and sing with the larks! They do not need close supervision, because they have born teachers, because they are born in the country! They have no need for physical education, for they get plenty of exercise without it. And so on, *ad infinitum*.

I am glad to see, however, that this attitude toward the rural school is changing very rapidly. In some states, even now, drawing other than the barn-door variety is taught to country children; music is being given to those children who love music and desire to learn how to sing; and rural supervision, too, is being introduced. It is a source of great satisfaction to me to know that in Oregon, next year, the rural schools in most of the counties will have at least a half-day's visit from a supervisor every six weeks, instead of an hour or so once a year, as formerly. These things some country schools now have; but so far, no physical education. Exercise they have in abundance, 'tis true, but no physical training.

There are those who say that to offer physical education in the rural schools is carrying coals to Newcastle. To a very slight extent only is that true; for, altho in most cases these children do not need exercise, they do need physical training. If teaching is for the purpose of developing the powers of the individual and giving these powers direction, then certainly physical education is highly important, both in the country and in the city. All good teaching begins by studying the needs of the individual to be taught. A glance at almost any group of rural-school pupils will reveal some of their needs—that many have stooped shoulders, flat chests, that some are anæmic, that some others are uncouth and awkward and ineffective in their movements, indicating that thru an excess of mere exercise thru work and a dearth of recreation, thru play and improper physical exercise, they have developed the bulk and strength of the body at the expense of its graces.

In considering this vital subject, a clear distinction should be drawn between physical exercise and physical training. The two employ the same physical forces, but not in the same way, and the results are vastly different. Serving as a spellbinder or as auctioneer or calling the pigs gives abundant exercise to the voice, yet it is the reverse in effect of voice-training. Keeping the mind busy during most of one's waking hours in flitting from one to another of the innumerable subjects that come to the average person, affords a kind of brain exercise, yet it is anything but intellectual training. And so it is with the child—mere movement or exercise of the muscular tissues does not operate to produce a strong, supple, symmetrical, well-disciplined body with the habit of effective action.

Again, physical education should be defined broadly. It is not enough to prescribe certain games, gymnastics, and the like. The course in physical culture must be so broad and comprehensive as to include also adequate education in the way of diet, eating, and drinking; both external and internal cleanliness and purity of the body thru frequent bathing and timely elimi-

nation of waste matter from the body; sleeping; the care of the eyes, teeth, hands, nails, and so on, and by no means least, a certain amount of sexology.

Country children, therefore, despite their favorable surroundings, do need physical training. They do need to have their bodies well looked after. The theory that their environment will attend to that matter has been tried altogether too long, and has been found to be too expensive in impaired health, suffering, disease, and death. I take it that the health of the child should be the central thought in every scheme of education, whether in the city or in the country. In my opinion, however, physical education in the rural districts will be different from that of the city, as it will have to be more in the nature of teaching the care of health, good form in sitting, standing, and walking, rather than giving much exercise for bodily development. The country boy needs to be taught that to go to bed without a bath when he has exercised to the limit is not conducive to sound sleep nor to a fresh and rested feeling in the morning. He needs to be instructed about the importance of proper mastication, following the selection of proper foods, and the importance of keeping his teeth in good condition. He should be taught the necessity for an abundance of fresh air at night, as well as in the day time. Most country children could easily sleep out in the open air in summer, and they would sleep out if they but knew the joy of it. It is not my claim that good health is the only thing in life, but I do argue that the conservation of the health of children is at least as important as is the conservation of the national forests; that to avoid tuberculosis in children is fully as important as to prevent the same disease in cattle; that any system of education which does not provide adequately for the physical child is absolutely unworthy; and that any law is cruel and unjust that compels children to attend school to the injury of their health.

And yet again, if the country child is to receive the benefits of physical training, it must be thru the medium of the school. As it is, he has play enough at school, but he needs something else. He needs a wise and well-trained teacher to give him regular and varied calisthenic drills, breathing exercises, instruction in regard to the care of the body, to inspire him with a just pride in a good carriage and in the cultivation of the faculties he has. He requires such drills and exercises as will result in ease of bearing, grace, dignity, poise. There should be a gymnasium for use in bad weather, and for practice in certain games and prescribed gymnastics, as well as to provide the essential bathing facilities. And with an awakened sense of the present neglect of the rural-school child, and a keen consciousness of his needs, the time is near at hand when the rural school will be equipped to carry out a course in physical education wholly adequate to the needs of the country boy and the country girl.

Then, too, there should be medical inspection in these schools. Indeed,

the need for such inspection is even greater in the country than in the city; for there the schools are not so well organized, and social-settlement work is unknown. Defective hearing, defective sight, and the neglect of teeth are strikingly common in the country. The fact that the country child has less than $13 yearly spent on his education, while the city child has about $39, does not lessen the need for medical inspection and instruction. I feel sure that medical inspection of the right kind for the public schools would receive the hearty support of the rural population of the state of Oregon. Medical inspection is not physical education, 'tis true; but it is a necessary step toward physical education, if we mean by the latter the symmetrical development of the individual.

Aside from the argument for physical education in the rural schools for the resulting physical improvement, I also argue for it as the best approach for moral teaching and for socializing country life.

Most if not all immoral practices spring from ignorance, idleness, some bodily weakness, solitude, or lack of a conscious incentive to conserve the bodily powers thru virtuous living. Likewise, these immoral practices weaken the body. We gain a great victory in the individual when we educate him on the physical side and show him what will strengthen him and what will weaken him, at the same time arousing his ambition to make the best of his physical powers. "Don't do this if you want to win the game," is a much stronger argument for the average child, than to say "Don't do this, because it is not right; and you wish to do what is right." Smoking, for instance, is bad for the adolescent. I have seen more boys cured of the smoking habit thru athletics than thru all the moral lectures I have ever heard given. The only reason why smoking is bad, aside from its cost of money, and its offensiveness to others, is because it undermines the health of the smoker. And to show this to the boy will, in many cases, cause him to discontinue its use, if one really convinces him of the injurious effects. Secret vices, which, according to reports, are very bad in the country, will greatly decrease with a proper knowledge of the effects upon the system, and with the inspiring and exhilarating feeling that comes with the proper physical exercises and the accompanying bath. I believe that sex physiology, if given at the proper time, in the proper way, is more important than geography to the average child. It does away with the immoral whispering, immoral note-writing, and, I think, much immoral musing.

All writers on sociology agree that one of the reasons why so many of the rural population leave the country for the city is because of the hunger for more social life. That many of them go to the city to their own injury, and to the greater misfortune of their families, is evident to all. The country sections, however, can provide for social intercourse of a high and varied order, as has been demonstrated by many of such rural communities. It is largely a manner of education in an appreciation of games and exer-

cises in which physical activity and dexterity play an important part. This play instinct is common to all of us, and thru it some have found the solution of the country-life problem. I am told by a supervising superintendent of the Philippine Islands that baseball, which is practically a new game there, has done more within the last few years for the civilization of the adult Filipino than have the army, the navy, commerce, and the school. Baseball has appealed to them as has no other game, not even excepting cock-fighting. It has brought together many tribes formerly hostile to one another; it has shown them that they are much alike, and that they really have a common interest; it has taught them to give and take without arousing enmity, has taught them that they need an umpire who is just and truthful, and has led them to desire that fair means only should be used.

It is said that the Mormon handcart immigration held evening dances after each day of fifteen or twenty miles of wearisome marching. Rest from physical exercise by more physical exercise may seem paradoxical, but the spirit was revived by the dance to such an extent that they felt their social unity and forgot their weariness. And thus it ever is. It is the play, the recreation, the association, the change, that relieves the tension on body and mind and spirit, giving a sense of relief, a feeling of exhilaration and buoyancy that leads to a consciousness of the kinship of man to man.

I take it that what the country districts need is more games when the whole population is present. We need some new games in which more people can take part. Baseball is good, but many young men are on the side lines, and there is no place in it for the girls. Kite-flying is a good pastime, and we hear that in the old countries adults, as well as children, get much pleasure from it. It makes one look upward, which is a good thing, for the reason that too many of us look too much to the ground. Pushball is said to be a great game, but the attendant expense is almost such as to make it prohibitive.

One Oregon teacher who takes the physical side of school work seriously, and whose school is noted for the large number of well-grown boys who attend it, has all the children take part in physical games for a part of the two hours of noon intermission. Promptly at twelve all the pupils go to their different fields for an hour, after which all return to their respective shower-bath rooms, which rooms were made by the pupils themselves. An old airtight heating-stove serves to heat the water that has been pumped by the boys into barrels, which are used for the hot-water tanks. When the bath is over, the pupils eat their lunch; after which they rest for a while, and then return to their studies much refreshed and the better able to do effective work. Under this plan, there are no stragglers home at night with chores undone, and there is no play not under supervision.

In my judgment, physical education ought to be outlined in the teachers' manual, and delegated authority should see that the course is followed.

Reports should be required, showing measurements from time to time, the weight, and other physical conditions, particularly defective conditions. Then every child in the land should be subject to competent medical inspection at least once each year. Medical and dental aid should be provided for the indigent, and this assistance should be extended to furnishing glasses for those of this class who have defective vision. Every child should be considered the child of the state, for improvement purposes as well as for punitive purposes.

GENERAL INDEX

[Names of authors of formal papers are set in SMALL CAPITALS. A † indicates a memorial sketch.]

Achievement from the Southland, A message of, 166
Act of Incorporation, 1
Active Members, Minutes of Annual Meeting of, 27
Adams, R. T.—Secretary's Minutes, Department of Secondary Education, 555
Addresses of Welcome (HIRAM W. JOHNSON), 67; (P. W. MCCARTHY), 67; (BENJAMIN IDE WHEELER), 69; (R. B. HALE), 71
Agricultural education, Report of the national committee on, 706
Agricultural education, School gardening in Hawaii as related to, 1126
Agricultural nature-study (CLAYTON F. PALMER), 1118
Agriculture and domestic science in normal schools with special reference to preparing teachers for community work (JOHN R. KIRK), 1152
Agriculture, Report of committee on courses of study in, 1138
ALDERMAN, L. R.—Physical education in elementary rural schools, 1156
ALEY, ROBERT J.—Needed adjustments between secondary schools and colleges, 461; Response to addresses of welcome, 72; The health of school children, 544; Secretary's Minutes, National Council of Education, 336
All-year-round schools, The balanced course of study and the, 267
ALLEN, E. T.—Forest conservation, 952
American education, Reorganization of, 94
American Indian Education of the, 252
An appreciation (ALFRED RONCOVIERI), 91
ANDREWS, MRS. FANNIE FERN—The peace movement and the public schools, 247; Discussion, 418
Annual Meeting of Active Members, Minutes of, 27
ARMSTRONG, V. A., and FROST, W. E.—Bacteriological tests of methods of cleaning, 985
Art education in public schools a necessity of civic perfection (ARTHUR B. CLARK), 769
Articulation of high school and college, Report of the committee on, 559
Art's service as a basis for classified knowledge (scientific development) (CHESHIRE L. BOONE), 778
ASWELL, JAMES B.—†Warren Easton, 179
AVERY, LEWIS B.—General science in the high school, 944
AVERY, SAMUEL—Can we shorten the term of years without decreasing efficiency of education in American schools? 126
AYRES, LEONARD P.—Health and ventilation, 885; Open-air schools, 898; The training of the mentally and physically unfortunate, 242; Discussion, 220
Bacteriological tests of methods of cleaning (W.D. FROST and V. A. ARMSTRONG), 985
BAKER, JAMES H.—Reorganization of American education, 94
Balanced course of study and the all-year-round schools (G. W. A. LUCKEY), 267
BALL, KATHERINE M.—The development of the color sense, 484
BARNES, CLIFFORD W.—Relation of moral and religious training, 397; Status of moral training in the public schools, 400
BARRETT, H. M.—The high-school teacher himself, 576
Baylor, Adelaide Steele—Discussion, 476
Becht, J. George—Discussion, 221
BENTLEY, RUFUS C.—Extra-classroom activities in the high school: their place and their importance, 581
BENTON, GUY POTTER—Education in the colleges and universities, 191
BERNHARD, C. A.—To what extent are teachers responsible for failures of students in the classroom? 861
BICKNELL, THOMAS W.—†James Ormond Wilson, 155
BISHOP, E. C.—Report of committee on courses of study in agriculture, 1138
Black, William H.—Discussion, 414
BLAINE, MRS. EMMONS—The opportunity of the teacher, 103
BLAIR, FRANCIS G.—Progress in public education, 146
BLAKE, KATHERINE D.—Peace in the schools, 140; The proper supervision of the reading of school children, 1016; Discussion, 1019
Blindness in children under school age, The prevention of, 1051
Bookkeeping fundamentals (WINFIELD S. MCKINNEY), 829
BOONE, CHESHIRE L.—Art's service as a basis for classified knowledge (scientific development), 778

Boone, Richard G.—The kindergarten: its influences upon higher education, 490
Brecheen, Thomas L.—To what extent are teachers responsible for failures of students in the classroom? 857
Brink, Gilbert N.—School publications, literary and musical organizations, dramatics, 588
Brittain, M. L.—Discussion, 221
Brookman, Miss—Discussion, 635
Brown, Elmer Ellsworth—Educational advance in the nation, 215
Brown J. Stanley—Discussion, 460
Bruce, Frank M.—Secretary's Minutes, Department of School Administration, 993
Brumbaugh, M. G.—Moral education: the problem stated, 347
Bruner, Frank G.—The influence of open-air and low-temperature schoolrooms on the mental alertness and scholarship of pupils, 890
Building up of professional education on a collegiate foundation from the viewpoint of the professional schools, (David Starr Jordan), 670
Burk, Frederic—The teacher's part in conservation, 970
Burke, Mrs. L. K.—Discussion, 418
Business English—what? why? how? (Sherwin Cody), 839
Butler, Louis C.—Discussion, 746
By-Laws, adopted July 10, 1907, 5; Art. I, Membership, 5; Art. II, Officers and Committees, 6; Art. III, Duties of Officers, 6; Art. IV, Board of Directors, 7; Art. V, The National Council, 7; Art. VI, Departments, 8; Art. VII, Meetings, 8; Art. VIII, Amendments, 8
Caldwell, Otis W.—Needed adjustments between secondary schools and colleges, 471; The new University of Chicago plan for college admission, 572
Calendar of meetings, 10
California county free libraries (Harriet G. Eddy), 1026
Call, Arthur Deerin—Secretary's Minutes, Department of Superintendence, 161
Campbell, P. L.—The future of intercollegiate athletics in the western states, 688
Can we eliminate the school laggard? (G. W. A. Luckey), 1046
Can we shorten the term of years without decreasing efficiency of education in American schools? (Samuel Avery), 126
Carpenter, Estelle—Secretary's Minutes, Department of Music Education, 787
Carr, John W.—Moral education thru the agency of the public schools, 351
Cary, Charles P.—Educational advance in the state, 210
Cause of education (Helen Marsh Wixson), 83
Causes of backwardness and mental deficiency in children and how to prevent them (Henry H. Goddard), 1039
Chadsey, Charles E.—Educational advance in the city, 203
Chamberlain, Arthur H.—Discussion, 474
Chapman, Frederick E.—Discussion, 807
Child protection and the social evil (Walter T. Sumner), 1110
Childs, C. W.—Commercial-economic geography, 842; Discussion, 855
Clark, Arthur B.—Art education in public schools a necessity of civic perfection, 769
Clark, Fran es Elliott—Public-school music and our national speech, 813
Clark, George A.—Shorthand—its educational and practical value, 845
Clark, Matie P.—The public-school domestic-science department as an influence in the community for enforcing pure-food laws and civic cleanliness, 760
Clifton, H. T.—Secretary's Minutes, Department of Science Instruction, 939
Cody, Sherwin—Business English—what? why? how? 839; Secretary's Minutes, Department of Business Education, 827; Discussion, 840, 841
Coe, George A.—Virtue and the virtues: a study of method in the teaching of morals, 419; Discussion, 418
College admission, The new University of Chicago plan for, 572
College admission, The new Harvard plan for, 567
College-entrance requirements, Report of the committee on, 729
College of liberal arts, Relation of, to the professional and practical schools, 664
College students, Moral training of, 425
Colleges and universities, Education in, 191
Color sense, The development of, 484
Coming of the humane element in education, A (Sherman C. Kingsley), 236; B (Leonard P. Ayres), 242; C (Fannie Fern Andrews), 247; D (H. B. Peairs), 252
Commercial-economic geography (C. W. Childs), 842
Commercial teacher, The essentials of the ideal, 865
Committee of nine on the articulation of high school and college, Report of, 559
Committee on a system of teaching morals in the public schools, Tentative report of, 342
Committee on a universal system of key notation, Report of, 323
Committee on college-entrance requirements, Report of, 729
Committee on cosmopolitan high-school curriculum, Report of, 591
Committee on courses of study in agriculture, Report of, 1138
Committee on economy of time in education, Preliminary report of, 222

Committee on efficiency of janitor-service, Report of, 977
Committee on simplified spelling, Report of, 704
Committee on terminology, Report of, 802
Committee on the Mexican centennial, Report of, 255
Committee on uniform records and reports, Preliminary report of, 271
Compensation of teachers (JOSEPH SCOTT), 121
CONNELLEY, CLIFFORD B.—To what extent does manual training aid in adjustment to environment? 711
Conservation, The teacher's part in, 970
COOK, GEORGE B.—The state superintendent and the General and Southern education boards, 305
Cook, John W.—Discussion, 414
Co-operation between home and school (WILLIAM B. OWEN), 1103
Corwin, R. W.—Discussion, 657
Cosmopolitan high-school curriculum, Report of committee on, 591
County superintendent and the rural communities (EDITH A. LATHROP), 303
Cowan, Fred H.—Discussion, 950
COWEN, GEORGE A.—Elementary or general science from the standpoint of the eastern schoolmaster, 940
Crabtree, James W.—Discussion, 418
CRANE, JULIA E.—Some mistakes of the music teacher which the viewpoint of the child would correct, 794
Cropsey, N.—Discussion, 413
CUMMINGS, HORACE H.—Report of the committee on the Mexican centennial, 255
Curricula for high schools of commerce in the United States (CHARLES H. MURPHY), 852
Curriculum, The need of a new standard of measurement for the various subjects of the, 518
CURRY, JAMES S.—Teaching typewriting for the best results, 834
DAVIDSON, PERCY E.—Results and impressions of a preliminary study of pedagogical retardation, 878; Secretary's Minutes, Department of Child Hygiene, 869
Davidson, William M.—Discussion, 443
Davis, Grace—Discussion, 656
DAVIS, HARVEY N.—The new Harvard plan for college admission, 567
Deaf child, Physiology and psychology of the, 1084
Department of Business Education, 827; of Child Hygiene, 869; of Elementary Education, 517; of Higher Education, 659; of Kindergarten Education, 477; of Library, 1015; of Manual Training and Art Education, 709; of Music Education, 787; of National Council, 331; of Normal Schools, 695; of Physical Education, 905; of Rural and Agricultural Education, 1117; of School Administration, 993; of School Patrons, 1093; of Science Instruction, 939; of Secondary Education, 555; of Special Education, 1031; of Superintendence, 161
Deutsch, Monroe E.—Secretary's Minutes, Department of Higher Education, 659
Development of personality thru education (MARGARET E. SCHALLENBERGER), 116
Development of the color sense (KATHERINE M. BALL), 484
Drew, William J.—Discussion, 655
DUNIWAY, C. A.—The separation and development of the junior college as distinct from the university, 660
Dwan, Stephen H.—Discussion, 841, 856
Dye, Charity—Discussion, 418
Dynamic value of manual arts in the public-school system of education (T. D. SENSOR), 719
EDDY, HARRIET G.—California county free libraries, 1026; Secretary's Minutes, Library Department, 1015
Education for efficiency, The kindergarten as a factor in, 507
Education in the colleges and universities (GUY POTTER BENTON), 191
Education in the elementary schools (ELLA FLAGG YOUNG), 183
Education in the secondary schools (ELLIS U. GRAFF), 186
Education of the American Indian (H. B. PEAIRS), 252
Educational advance in the city (CHARLES E. CHADSEY), 203
Educational advance in the nation (ELMER ELLSWORTH BROWN), 215
Educational advance in the state (CHARLES P. CARY), 210
Educational epoch in New America (GEORGE E. MACLEAN), 226
Efficiency of education in American schools, Can we shorten the term of years without decreasing, 126
Efficiency, The kindergarten as a factor in education for, 507
Elementary or general science for high schools as it appears to a western college professor (W. C. MORGAN), 948
Elementary or general science from the standpoint of the eastern schoolmaster (GEORGE A. COWEN), 940
Elementary rural schools, Physical education in, 1156
Elementary schools, Education in, 183
Elliott, O. L.—Secretary's Minutes, Department of Secondary Education, 555
Ellis, W. F., Jr.—Secretary's Minutes, Classical Round Table, 556
Engineering graduates in the United States, The supply of and demand for, 681
English education, Present problems in, 132
Essentials of the ideal commercial teacher (P. M. FISHER), 865

Evans, Lawton B.—The glory of children of the South, 175
Evans, W. A.—The health of the child the joint concern of parents and teacher, 913
Exceptional children, Legal provisions for, 1070
Extra-classroom activities in the high school: their place and their importance (Rufus C. Bentley), 581
Fagge, Ethelwyn H.—High-school libraries, 1019
Farnham, Mary Frances—Discussion, 1108
Felmley, David—High-school preparation of candidates for normal-school training, 445; The normal school and the training school, 700; Discussion, 657
Final aim of modern foreign-language study in secondary education (J. Henry Senger), 639
Fisher, Ida M.—The relation of music to school activities, 808
Fisher, P. M.—The essentials of the ideal commercial teacher, 865
Fitzpatrick, Frank A.—Discussion, 418
Flagg, Etta P.—Some actual needs for intelligent purchasing of household commodities and practical methods of keeping household accounts, 765
Foote, Arthur—Music in the college, 803
Forest conservation (E. T. Allen), 952
Foster, William T.—Discussion, 653, 655
Frost, W. D.—Our short course for janitors, 990
Frost, W. D., and Armstrong, V. A.—Bacteriological tests of methods of cleaning, 985
Fullerton, C. A.—The opportunity and the responsibility of normal schools in public-school music, 822
Future of intercollegiate athletics in the western states (P. L. Campbell), 688
Garlick, Mr.—Discussion, 655
Gavett, G. Irving—Discussion, 630
Gearhart, May—What has art in the schools done to preserve and cultivate the imagination? 783
General science in the high school (Lewis B. Avery), 944
Gerwig, George W.—The requisites of the efficient teacher in industrial schools, 722
Gibson, Carleton B.—Progress in vocational training, 260
Gideon, A.—Simplified spelling from the scholarly standpoint and with reference to the masses: the argument for simplified spelling, 645; Secretary's Minutes, Modern Foreign Language Round Table, 557; Discussion, 680
Glory of children of the South (Lawton B. Evans), 175
Goddard, Henry H.—Causes of backwardness and mental deficiency in children and how to prevent them, 1039; Two thousand children tested by the Binet measuring scale for intelligence, 870
Graff, Ellis U.—Education in the secondary schools, 186
Grant, A.—Discussion, 634
Graves, Walter H.—Making Latin composition of greater value, 637
Greene, Frances M.—Sex hygiene, 917
Greenwood, James M.—The home and school life, 377; Discussion, 443
Greenwood, Mrs. James M.—Discussion, 458
Groszmann, Maximilian P. E.—Legal provisions for exceptional children, 1070; Discussion, 418
Guerard, Albert Leon—Literary appreciation in the study of foreign languages: its opportunities and limitations; with special reference to the study of French, 641
Guillou, Alfred—Some present problems in the literature of the manual arts and vocational education, 756
Gwinn, J. M.—The ideals of people of the South, 169
Hagelthorn, Signe E.—Secretary's Minutes, Department of Physical Education, 905
Hale, R. B.—Address of welcome, 71
Hall, H. C.—Discussion, 653
Hanna, John Calvin—Social functions, 586
Harford, Mrs. L. L.—Discussion, 856
Hart, B. F.—Discussion, 857
Hartley, Victorine—Discussion, 801
Health and ventilation (Leonard P. Ayres), 885
Health of school children (Robert J. Aley), 544
Health of the child the joint concern of parent and teacher (W. A. Evans), 913
Health, Playgrounds and, 549
Heeter, S. L.—Separate schools with separate courses of training for the separate needs of our children, 1034
Hewett, Miss—Discussion, 634
Hicks, Vinnie C.—What constitutes a subnormal child, and to what extent can he be trained? 1077
High school, Extra-classroom activities in the; their place and their importance, 581
High-school libraries (Ethelwyn H. Fagge), 1019
High-school preparation of candidates for normal-school training, I (David Felmley), 445; II (John R. Kirk), 450
High-school teacher himself (H. M. Barrett), 576
Hines, Linnaeus N.—The ideal school board from the superintendent's point of view, 994
Hofer, Mari R.—Music in the kindergarten, 479
Home and school life (James M. Greenwood), 377
Hosic, James Fleming—The questions at issue, 592

Household arts, Requisites for the effective teaching of the manual and, 747
Housh, W. H.—Discussion. 1025
Huggins, Harriet E.—Secretary's Minutes, Department of Kindergarten Education, 477
HULST, CORNELIA STEKETEE—Organization of the course in literature in secondary schools, particularly with a regard to history, 598
Humane element in education, The coming of the, 236
HUNTING, W. J.—Secretary's Minutes, English Round Table, 555
Hygiene of vision (F. PARK LEWIS), 1059
Hypothesis in education (ELLA FLAGG YOUNG), 87
HYRE, MRS. SARAH E.—Unity of ideals and purposes as gained from school administration, 319
Ideal school board from the superintendent's point of view (LINNAEUS N. HINES), 994
Ideals of the people of the South (J. M. GWINN), 169
Improvement of teachers in service in city schools (HARLAN UPDEGRAFF), 433
In Memoriam—James Ormond Wilson (THOMAS W. BICKNELL), 155; Milton Bradley (A. L. WEBBER), 488; Warren Easton (JAMES B. ASWELL), 179; William Wallace Stetson (PAYSON SMITH), 180 .
Incorporation, Act of, 1; certificate of, 9
Indiana accounting board to the public schools, The relation of, 1002
Industrial education in Europe, The new standard of present-day, 740
Industrial education in London (KATE STEVENS), 523
Industrial schools, The requisite of the efficient teacher in, 722
Influence of open-air and low-temperature schoolrooms on the mental alertness and scholarship of pupils (FRANK G. BRUNER), 890
Inskeep, L. D.—Discussion, 856
Intercollegiate athletics in the western states, The future of, 688
Introduction of President Young (JOSIAH L. PICKARD), 74
James Ormond Wilson† (THOMAS W. BICKNELL), 155
Johnson, D. B.—Discussion, 415
JOHNSON, HELEN LOUISE—The requisites for the effective teaching of the manual and household arts, 747; Secretary's Minutes, Department of Manual Training and Art Education, 709
JOHNSON, HIRAM W.—Address of welcome, 67
Johnson, Riley O.—Discussion, 1155
JORDAN, DAVID STARR—Moral training of college students, 425; Temperance and society, 75; The building up of professional education on a collegiate foundation from the viewpoint of the professional schools, 670
Journal of Proceedings of General Sessions, 61
Junior college as distinct from the university, The separation and development of, 660
KANE, THOMAS F.—The relation of the college of liberal arts to the professional and practical schools, 664
Kerr, M. R.—Discussion, 657
Key notation, Report of committee on a universal system of, 323
KEYES, CHARLES H.—Introductory statement, 340
Kindergarten as a factor in education for efficiency (BERTHA M. MCCONKEY), 507
Kindergarten as an ethical laboratory (EVELYN PLUSS), 503
Kindergarten of the future (FRANK EDSON PARLIN), 511
Kindergarten, The; its influence upon higher education (RICHARD G. BOONE), 490
KINGSLEY, CLARENCE D.—Report of the committee of nine on the articulation of high school and college, 559
KINGSLEY, SHERMAN C.—The open-air school, 236
KIRK, JOHN R.—Agriculture and domestic science in normal schools with special reference to preparing teachers for community work, 1152; High-school preparation of candidates for normal-school training, 450; Discussion, 416, 443
KREUZPOINTNER, PAUL—The new standard of the present-day industrial education in Europe, 740; Discussion, 728
LANGE, ALEXIS F.—Some phases of university efficiency, 672
LATHROP, EDITH A.—The county superintendent and the rural communities, 303
Latin in the lower grades (below the high school) (H. C. NUTTING), 635
Legal provisions for exceptional children (MAXIMILIAN P. E. GROSZMANN), 1070
LEWIS, F. PARK—The hygiene of vision, 1059
Life of the teacher (CHARLES ZUEBLIN), 123
Literary appreciation in the study of foreign languages: its opportunities and limitations; with special reference to the study of French (ALBERT LEON GUERARD), 641
LITTLE, C. N.—The supply of and demand for engineering graduates in the United States, 681
Long, Edith—Discussion, 634
LOWRY, CHARLES D.—Physiology and psychology of the deaf child, 1084
LUCKEY, G. W. A.—Can we eliminate the school laggard? 1046; Needed adjustments between secondary schools and colleges, 466; The balanced course of study and the all-year-round schools, 267

MacCaughey, Vaughan—School gardening in Hawaii as related to agricultural education, 1126
MacDonald, John—Discussion, 417
MacLean, George E.—An educational epoch in new America, 226
Making Latin composition of greater value (Walter H. Graves), 637
Maltby, Mrs. Adelaide Bowles—Discussion, 1017
Manual and household arts, Requisites for the effective teaching of the, 747
Manual arts and vocational education, Some present problems in the literature of the, 756
Manual arts in the public-school system of education, Dynamic value of, 719
Manual training, To what extent does it aid in adjustment to environment, 711
Marsh, J. Frank—The state superintendent, the county superintendent, and the state normal, 304
McCarthy, P. W.—Address of welcome, 67
McConkey, Bertha M.—The kindergarten as a factor in education for efficiency, 507
McKinney, Winfield S.—Bookkeeping fundamentals, 829
Means of moral training afforded by the public schools (John W. Carr), 367
Meetings, Calendar of, 10
Message of achievement from the Southland, A (Henry J. Willingham) 166; B (J. M. Gwinn), 169; C (Lawton B. Evans), 175
Mexican centennial, Report of the committee on the, 255
Millspaugh, J. F.—Discussion, 418
Milton Bradley† (A. L. Webber), 488
Minutes of Annual Meeting of Active Members, 27
Minutes of Meeting of Board of Directors, 1910–11, 37
Minutes of Meeting of Board of Trustees, 59
Minutes of Meeting of New Board of Directors, 1911–12, 54
Modern foreign-language study in secondary education, The final aim of, 639
Monroe, Edwin S.—Discussion, 444
Moral and religious training, Relation of, 397
Moral education: the problem stated (M. G. Brumbaugh), 347
Moral education thru the agency of the public schools (John W. Carr), 351
Moral instruction in the public schools—A tentative course by grades (John W. Carr), 351
Moral instruction of the child (Charles E. Rugh), 497
Moral training afforded by the public schools, Means of, 367
Moral training in the public schools, Status of, 400
Moral training of college students (David Starr Jordan), 425
Morals in the public schools, Some instinctive roots upon which the teaching of may be grafted, 426
Morals in the Public schools, Tentative report of committee on a system of teaching, 342
Morgan, W. C.—Elementary or general science for high schools as it appears to a western college professor, 948
Morse, A. G.—Discussion, 855, 857
Motivation of the children's work in the elementary schools, Report on the, 528
Mott, Thomas A.—Discussion, 417
Murphy, Charles H.—Curricula for high schools of commerce in the United States, 852; Discussion, 856, 857
Music in the college (Arthur Foote), 803
Music in the kindergarten (Mari R. Hofer), 479
Music of the community, Public-school music in relation to the, 790
Myers, W. A.—The relation of the Indiana accounting board to the public schools, 1002
National committee of fifteen on geometry syllabus, Provisional report of, 607
National committee on agricultural education, Report of the, 706
National Council of Education, Constitution, 331; Officers for 1911–12, 333; Members, 334; Secretary's Minutes, 336
National vitality (William F. Snow), 965
Need of a new standard of measurement for the various subjects of the curriculum (Edwin R. Snyder), 518
Needed adjustments between secondary schools and colleges, I (Robert J. Aley), 461; II (G. W. A. Luckey), 466; III (Otis W. Caldwell), 471
Nelson, A. C.—Discussion, 418
New Harvard plan for college admission (Harvey N. Davis), 567
New standard of the present-day industrial education in Europe (Paul Kreuzpointner), 740
New University of Chicago plan for college admission (Otis W. Caldwell), 572
Normal school and the training school (David Felmley), 700
Normal-school training, High-school preparation of candidates for, 445
Normal schools in public-school music, The opportunity and the responsibility of, 822
Noyes, George R.—Discussion, 655
Nutting, H. C.—Latin in the lower grades (below the high school), 635
Officers of General Association for 1910–11, 12; of Departments for 1910–11, 13; of General Association for 1911–12, 16; of Departments for 1911–12, 17
O'Keefe, Nellie M.—Secretary's Minutes, Department of Elementary Education, 517

Open-air and low-temperature schoolrooms, Influence on the mental alertness and scholarship of pupils, 890
Open-air school, The (SHERMAN C. KINGSLEY), 236
Open-air schools (LEONARD P. AYRES), 898
Opportunity and the responsibility of normal schools in public-school music (C. A. FULLERTON), 822
Opportunity of the teacher (MRS. EMMONS BLAINE), 103
Organization of the course in literature in secondary schools, particularly with a regard to history (CORNELIA STEKETEE HULST), 598
Our educational advance and improvement over the past, A (CHARLES E. CHADSEY), 203; B (CHARLES P. CARY), 210: C (ELMER ELLSWORTH BROWN), 215
Our short course for janitors (W. D. FROST), 990
OWEN, WILLIAM B.—Co-operation between home and school, 1103
PALMER, CLAYTON F.—Agricultural nature-study, 1118
PARDEE, GEORGE C.—Water-powers, lands, and minerals, 958
PARLIN, FRANK EDSON—The kindergarten of the future, 511
Paroni, Romilda—Discussion, 923
PATTON, NORMAND S.—Present-day tendencies of school architecture, 1009
Peace in the schools (KATHERINE D. BLAKE), 140
Peace movement and the public schools (MRS. FANNIE FERN ANDREWS), 247
PEAIRS, H. B.—Education of the American Indian, 252
PEARSE, CARROLL G.—The school laggard, 1033; Discussion, 265, 441
Personality thru education, The development of, 116
Phillips, John H.—Discussion, 456
Physical education in elementary rural schools (L. R. ALDERMAN), 1156
Physical training for girls of high-school age—the biological point of view (JOHN M. TYLER), 933
Physiology and psychology of the deaf child (CHARLES D. LOWRY), 1084
PICKARD, JOSIAH L.—Introduction of President Young, 74
Playground movement in America (L. H. WEIR), 925
Playgrounds and health (L. H. WEIR), 549
PLUSS, EVELYN—The kindergarten as an ethical laboratory, 503
Potentiality of the school garden (CYRIL A. STEBBINS), 1131
Powell, Olive Thomas—Secretary's Minutes, Department of Special Education, 1031
Preliminary report of the committee on economy of time in education (HENRY SUZZALLO), 222
Preliminary report of the committee on uniform records and reports, 271
Present-day tendencies of school architecture (NORMAND S. PATTON), 1009
Present problems in English education (KATE STEVENS), 132
Present status of education in America, A (ELLA FLAGG YOUNG), 183; B (ELLIS U. GRAFF), 186; C (GUY POTTER BENTON), 191
Prevention of blindness in children under school age (MARK D. STEVENSON), 1051
Prichard, Lucy E.—Secretary's Minutes, Department of School Patrons, 1093
Proceedings of General Sessions, Journal of, 61
Professional life as applied to teaching, The standards of, 199
Professional training, Unity of ideals and purposes as gained from, 309
Progress and the true meaning of the practical in education, A (CARLETON B. GIBSON), 260; B (G. W. A. LUCKEY), 267
Progress in public education (FRANCIS G. BLAIR), 146
Progress in vocational training (CARLETON B. GIBSON), 260
Progress of schools of the South (HENRY J. WILLINGHAM), 166
Proper supervision of the reading of school children (KATHERINE D. BLAKE), 1016
Provisional report of the national committee of fifteen on geometry syllabus, 607
Public education, Progress in, 146
Public health education committee of American Medical Association, Report of, 909
Public-school domestic science department as an influence in the community for enforcing pure-food laws and civic cleanliness (MATIE P. CLARK), 760
Public-school music and our national speech (FRANCES ELLIOTT CLARK), 813
Public-school music in relation to the music of the community (ELSIE M. SHAWE), 790
Public-school music, The opportunity and the responsibility of normal schools in, 822
Pupil self-government as a training for citizenship (RICHARD WELLING), 1005
Questions at issue, The (JAMES FLEMING HOSIC), 592
Relation of academic and professional work in a normal school (HOMER H. SEERLEY), 697
Relation of moral and religious training (CLIFFORD W. BARNES), 397
Relation of music to school activities (IDA M. FISHER), 808
Relation of the college of liberal arts to the professional and practical schools (THOMAS F. KANE), 664

Relation of the Indiana accounting board to the public schools (W. A. MYERS), 1002
Religious training, Relation of moral and, 397
Reorganization of American education (JAMES H. BAKER), 94
Report of Board of Trustees, Twenty-fifth annual, 23
Report of committee on a system of teaching morals in the public schools, Tentative, 342
Report of committee on cosmopolitan high-school curriculum (SPENCER R. SMITH), 591
Report of committee on courses of study in agriculture (E. C. BISHOP), 1138
Report of committee on efficiency of janitor service, 977
Report of committee on terminology, 802
Report of public health education committee of American Medical Association, 909
Report of the committee of nine on the articulation of high school and college (CLARENCE D. KINGSLEY), 559
Report of the committee on a universal system of key notation, 323
Report of the committee on college-entrance requirements, 729
Report of the committee on simplified spelling, 704
Report of the committee on the Mexican centennial (HORACE H. CUMMINGS), 255
Report of the national committee on agricultural education, 706
Report of the school health committee of the Department of School Patrons, 906
Report of the school revenue committee of the Department of School Patrons, 1094
Report of Treasurer, Annual, for 1910–11, 20
Report on the motivation of the children's work in the elementary schools (H. B. WILSON), 528
Requisites for the effective teaching of the manual and household arts (HELEN LOUISE JOHNSON), 747
Requisites of the efficient teacher in industrial schools (GEORGE W. GERWIG), 722
Response to addresses of welcome (ROBERT J. ALEY), 72
Results and impressions of a preliminary study of pedagogical retardation (PERCY E. DAVIDSON), 878
Ripley, L. W.—Discussion, 1029
Robinson, L. A.—Secretary's Minutes, Department of Rural and Agricultural Education, 1117
RONCOVIERI, ALFRED—An appreciation, 91
Ross, E. Athelstan—Discussion, 728
Round tables: Classical, 635; English, 592; mathematics, 607; modern foreign languages, 639; state and county superintendents, 303; superintendents of smaller cities, 309
Rowell, Percy E.—Discussion, 951
RUGH, CHARLES E.—Moral instruction of the child, 497; Some instinctive roots upon which the teaching of morals in the public schools may be grafted, 426; Discussion, 924
Rural communities, The county superintendent and the, 303
SCHALLENBERGER, MARGARET E.—The development of personality thru education, 116
School activities in relation to children's eyes (J. A. SHAWAN), 1063
School activities, The relation of music to, 808
School architecture, Present-day tendencies of, 1009
School garden, Potentiality of the, 1131
School gardening in Hawaii as related to agricultural education (VAUGHAN MACCAUGHEY), 1126
School health committee of the Department of School Patrons, Report of the, 906
School laggard, The (CARROLL G. PEARSE), 1033
School publications, literary and musical organizations, dramatics (GILBERT N. BRINK), 588
School revenue committee of the Department of School Patrons, Report of the, 1094
Scientific basis for ventilation standards (C.-E. A. WINSLOW), 977
SCOTT, JOSEPH—The compensation of teachers, 121
Secondary schools and colleges, Needed adjustments between, 461
Secondary schools, Education in, 186
SEERLEY, HOMER H.—Simplified spelling with reference to the masses, 651; The relation of academic and professional work in a normal school, 697; Discussion, 460
SENGER, J. HENRY—The final aim of modern foreign-language study in secondary education, 639; Discussion, 653
SENSOR, T. D.—Dynamic value of manual arts in the public-school system of education, 719
Separate schools with separate courses of training for the separate needs of our children (S. L. HEETER), 1034
Separation and development of the junior college as distinct from the university (C. A. DUNIWAY), 660
Seward, Samuel S., Jr.—Discussion, 604
Sex hygiene (FRANCES M. GREENE), 917
SHAWAN, J. A.—School activities in relation to children's eyes, 1063; Discussion, 459
SHAWE, ELSIE M.—Public-school music in relation to the music of the community, 790
Shorthand—its educational and practical value (GEORGE A. CLARK), 845

Simplified spelling from the scholarly standpoint and with reference to the masses: the argument for simplified spelling (A. GIDEON), 645
Simplified spelling, Report of the committee on, 704
Simplified spelling with reference to the masses (HOMER H. SEERLEY), 651
Skilling, W. T.—Discussion, 952
Smith, Mr.—Discussion, 635
SMITH, PAYSON—†William Wallace Stetson, 180
SMITH, SPENCER R.—Report of committee on cosmopolitan high-school curriculum, 591
SNOW, WILLIAM F.—National vitality, 965
SNYDER, EDWIN R.—The need of a new standard of measurement for the various subjects of the curriculum, 518
Social functions (JOHN CALVIN HANNA), 586
Some actual needs for intelligent purchasing of household commodities and practical methods of keeping household accounts (ETTA P. FLAGG), 765
Some instinctive roots upon which the teaching of morals in the public schools may be grafted (CHARLES E. RUGH), 426
Some mistakes of the music teacher which the viewpoint of the child would correct (JULIA E. CRANE), 794
Some phases of university efficiency (ALEXIS F. LANGE), 672
Some present problems in the literature of the manual arts and vocational education (ALFRED GUILLOU), 756
Southland, A message of achievement from the, 166
Stamper, Alva W.—Discussion, 633, 634
Standards of professional life as applied to teaching (HENRY SUZZALLO), 199
State reports of joint committees and affiliated organizations, 1910–11, Summary of, 1097
State superintendent and the General and Southern education boards (GEORGE B. COOK), 305
State superintendent, the county superintendent, and the state normal (J. FRANK MARSH), 304
Status of moral training in the public schools (CLIFFORD W. BARNES), 400
STEBBINS, CYRIL A.—Potentiality of the school garden, 1131
STEVENS, KATE—Industrial education in London, 523; Present problems in English education, 132
STEVENSON, MARK D.—The prevention of blindness in children under school age, 1051
Stuart, R. R.—Discussion, 856
Summary of state reports of joint committees and affiliated organizations, 1910–11, 1097
SUMNER, WALTER T.—Child protection and the social evil, 1110
Supply of and demand for engineering graduates in the United States (C. N. LITTLE), 681
SUZZALLO, HENRY—Preliminary report of the committee on economy of time in education, 222; The standards of professional life as applied to teaching, 199
Taylor, F. C.—Discussion, 638
Teacher's part in conservation (FREDERIC BURK), 970
Teaching typewriting for the best results (JAMES S. CURRY), 834
Temperance and society (DAVID STARR JORDAN), 75
Terry, H. L.—Discussion, 952
THOMPSON, ALFRED C.—Unity of ideals and purposes as gained from professional training, 309
To what extent are teachers responsible for failures of students in the classroom? I (THOMAS L. BRECHEEN), 857; II (C. A. BERNHARD), 861
To what extent does manual training aid in adjustment to environment? (CLIFFORD B. CONNELLEY), 711
Tower, Willis E.—Discussion, 951
Training for citizenship, Pupil self-government as a, 1005
Training of the mentally and physically unfortunate (LEONARD P. AYRES), 242
Training school, The normal school and the, 700
Treasurer's annual report for 1910–11, 20
Trustees, Board of, Twenty-fifth Annual Report of, 23; Minutes of meetings of, 59
Two thousand children tested by the Binet measuring scale for intelligence (HENRY H. GODDARD), 870
TYLER, JOHN M.—Physical training for girls of high-school age—the biological point of view, 933
Uniform records and reports, Preliminary report of the committee on, 271
Unity of ideals and purposes as gained from professional training (ALFRED C. THOMPSON), 309
Unity of ideals and purposes as gained from school administration (MRS. SARAH E. HYRE), 319
Unity of ideals and purposes as gained from school supervision (E. C. WARRINER), 311
Unity of ideals and purposes in teachers, A (ALFRED C. THOMPSON), 309; B (E. C. WARRINER), 311; C (MRS. SARAH E. HYRE), 319
University efficiency, Some phases of, 672
UPDEGRAFF, HARLAN—Improvement of teachers in service in city schools, 433
Ventilation standards, The scientific basis for, 977
Virtue and the virtues: a study of method in the teaching of morals (GEORGE A. COE), 419
Vocational education, Some present problems in the literature of the manual arts and, 756

Vocational training, Progress in, 260
Ward, May A.—Secretary's Minutes, Department of Normal Schools, 695
Warren Easton† (James B. Aswell) 179
Warriner, E. C.—Unity of ideals and purposes as gained from school supervision, 311
Water-powers, lands, and minerals (George C. Pardee), 958
Webber, A. L.—†Milton Bradley, 488
Weir, L. H.—Playgrounds and health, 549; The playground movement in America, 925
Welling, Richard—Pupil self-government as a training for citizenship, 1005
West, Mr.—Discussion, 635
Westcott, Mr.—Discussion, 635
What constitutes a subnormal child and to what extent can he be trained? (Vinnie C. Hicks), 1077
What has art in the schools done to preserve and cultivate the imagination? (May Gearhart), 783
Wheeler, Benjamin Ide—Address of welcome, 69; Discussion, 841
William Wallace Stetson† (Payson Smith), 180
Willingham, Henry J.—The progress of schools of the South, 166
Wilson, H. B.—Report on the motivation of the children's work in the elementary schools, 528
Winslow, C.-E. A.—The scientific basis for ventilation standards, 977
Wixson, Helen Marsh—The cause of education, 83
Work, Cree T.—Discussion, 419
Works, George A.—Discussion, 316
Young, Ella Flagg—Education in the elementary schools, 183; Hypothesis in education, 87
Zueblin, Charles—The life of the teacher, 123

LANE MEDICAL LIBRARY

To avoid fine, this book should be returned on or before the date last stamped below.

National education assoc.
Journal of proceedings a
1911 and addresses. 88944

NAME	DATE DUE